

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**



**CONTRACT NO. 2167  
SOLICITATION NO. 2024-SWB-83**

**Lead Service Line Replacements for Schools and Residential Connections**

**PROPOSALS DUE ON  
December 4, 2024, AT 11:00 A.M., CENTRAL TIME**

**SECTION 00 01 07**

**SEALS PAGE**

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

**CONTRACT 2167**

**LEAD SERVICE LINE REPLACEMENTS FOR SCHOOLS AND  
RESIDENTIAL CONNECTIONS**

ENIRONMENTAL



Felicia Rose Bergeron 11/7/24  
State of Louisiana License No. 39960

A handwritten signature in blue ink, appearing to read "F.R. Bergeron", written over a horizontal line.

Seal and signature applies to project specifications for SWBNO  
Contract No. 2167



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SEWERAGE & WATER BOARD OF NEW ORLEANS

ADVERTISEMENT FOR BIDS

LEAD SERVICE LINE REPLACEMENTS FOR SCHOOLS AND RESIDENTIAL CONNECTIONS

CONTRACT NO. 2167

SOLICITATION NO. 2024-SWB-83

The Project contemplated consists of inspection and replacement of lead service lines from Main to Meter. The work will be completed in all respects within 365 days calendar days from the date when the contract times commence to run.

**Equal Opportunity in Employment: All qualified applicants will receive consideration for employment without regard for race, color, religion, sexual orientation, gender identity, national origin, genetics, disability, or veteran status. Bidders on this work will be required to comply with the President's Executive Order No. 11246, as amended. The requirements for bidders and contractors under this order are explained in the specifications.**

Bid Documents and proposal forms are available for download on **November 8, 2024**, at the following websites:

SWBNO: [https://www2.swbno.org/business\\_bidspecifications.asp](https://www2.swbno.org/business_bidspecifications.asp)

LAPAC: <https://wwwcfprd.doa.louisiana.gov/OSP/LaPAC/dspBid.cfm?search=department&term=181>

A **NON-MANDATORY** pre-bid conference will be held on **November 20, 2024, at 1:00 p.m.** Central Time at the Purchasing Conference Room 131, 625 St. Joseph Street, New Orleans, Louisiana or if you are unable to attend this in-person meeting, you can also join via teleconference call:

## Microsoft Teams meeting

**Join on your computer, mobile app or room device**

[Join the meeting now](#)

Meeting ID: 265 347 932 368

Passcode: KEU4RB

[Download Teams](#) | [Join on the web](#)

**Or call in (audio only)**

+1 504-224-8698,,753224492# United States, New Orleans

Phone Conference ID: 753 224 492#

All inquiries shall be directed to Prentice Mackyeon, Purchasing Agent, at [pmackyeon@swbno.org](mailto:pmackyeon@swbno.org). The deadline for inquiries is on **November 21, 2024, at 5:00 p.m.** Central Time.

Bids are due on **December 4, 2024, at 11:00 a.m.** Any Bids received after the specified time will be rejected.

Bids will then be publicly opened and read on **December 4, 2024, at 1:00 p.m.** at Sewerage and Water Board of New Orleans, 625 St. Joseph Street, Purchasing Conference Room 131, New Orleans, Louisiana. You can join in person or online at:

**ADVERTISEMENT FOR BIDS**

Microsoft Teams meeting

**Join on your computer, mobile app or room device**

**[Join the meeting now](#)**

Meeting ID: 262 483 144 117

Passcode: LJ8MJn

[Download Teams](#) | [Join on the web](#)

**Or call in (audio only)**

[+1 504-224-8698,,166004405#](#) United States, New Orleans

Phone Conference ID: 166 004 405#

LATE BIDS WILL NOT BE ACCEPTED.

## INSTRUCTIONS TO BIDDERS

### 1. DEFINED TERMS

1.1. Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

1.1.1. *Issuing Office*—The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered: Sewerage and Water Board of New Orleans, 625 St. Joseph Street, Procurement Department Room 133, New Orleans, Louisiana 70165.

### 2. COPIES OF BIDDING DOCUMENTS

2.1. Complete sets of the Bidding Documents are available in electronic form on the following websites:

[https://www2.swbno.org/business\\_bidspecifications.asp](https://www2.swbno.org/business_bidspecifications.asp)

<https://wwwcfprd.doa.louisiana.gov/OSP/LaPAC/dspBid.cfm?search=department&term=181>

2.2. Complete sets of Bidding Documents shall be used in preparing Bids. Neither Owner nor Engineer assumes responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.

2.3. Drawings included in the Bidding Documents are electronic .pdf files generated from electronic drawing files. Any reduction from actual size is indicated by a note or scale bar on Drawing.

2.4. Owner and Engineer, in making Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license or grant for any other use.

### 3. QUALIFICATIONS OF BIDDERS

3.1. In order to perform public work, Bidder and its Subcontractors, prior to award of Contract or as otherwise required by the jurisdiction, shall hold or obtain such licenses as required by State Statutes, and federal and local Laws and Regulations.

3.2. Bidder is advised to carefully review those portions of the Bid Form requiring representations and certifications.

### 4. EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

4.1. Subsurface and Physical Conditions:

4.1.1. The Supplementary Conditions identify:

4.1.1.1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site.

4.1.1.2. Those drawings known to Owner of physical conditions relating to existing surface and subsurface structures at the Site.

4.1.2. Copies of reports and drawings referenced will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings. Costs associated with making available copies of reports and drawings shall be borne by Bidder.

4.2. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner or others.

4.3. Hazardous Environmental Condition:

4.3.1. The Supplementary Conditions identify reports and drawings known to Owner relating to a Hazardous Environmental Condition identified at the Site.

4.3.2. Copies of reports and drawings referenced will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.06 of the General Conditions has been identified and established in Paragraph 4.06 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings. Costs associated with making available copies of reports and drawings shall be borne by Bidder.

4.4. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 4.02 through 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental

Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 4.06 of the General Conditions.

4.5. On request, Owner will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Owner deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

4.6. Related Work at Site: Reference is made to the General Requirements for identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request Owner will provide to each Bidder for examination, access to Contract Documents (other than portions thereof related to price) for such other work.

4.7. Safety: Paragraph 6.13.C of the General Conditions indicates that if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.8. It is responsibility of each Bidder before submitting a Bid to:

4.8.1. Examine and carefully study the Bidding Documents, other related data identified in the Bidding Documents, and any Addenda.

4.8.2. Visit the Site to become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

4.8.3. Become familiar with to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

4.8.4. Carefully study all information provided and referenced in plans and specifications.

4.8.5. Consider the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents.

4.8.6. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) Bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

4.8.7. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

4.8.8. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in Bidding Documents and confirm that written resolution thereof by Engineer is acceptable to Bidder.

4.8.9. Determine Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance of the Work.

4.9. Submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this article; that without exception the Bid is premised upon performing and furnishing the Work required by Bidding Documents and applying specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by Bidding Documents; that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder; and that Bidding Documents are generally sufficient to indicate and convey understanding of terms and conditions for performing and furnishing the Work.

## 5. SPECIAL PRODUCT REQUIREMENTS

5.1. Bidder's attention is directed to the Supplementary Conditions, Paragraph 6.03.

## 6. PREBID CONFERENCE

A **NON-MANDATORY** pre-bid conference will be held on **November 20, 2024, at 1:00 p.m.** Central Time at the Sewerage and Water Board of New Orleans, Purchasing Conference Room 131 at 625 St. Joseph St., New Orleans, Louisiana, 70165. Refer to Instructions to Bidders for additional information. or if you are unable to attend this in-person meeting, you can also join via teleconference call:

## Microsoft Teams meeting

**Join on your computer, mobile app or room device**

[Join the meeting now](#)

Meeting ID: 265 347 932 368

Passcode: KEU4RB

[Download Teams](#) | [Join on the web](#)

**Or call in (audio only)**

[+1 504-224-8698,,753224492#](#) United States, New Orleans

Phone Conference ID: 753 224 492#

6.1. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are required to attend and participate in the conference. An award will be issued to Bidders that have a representative at the pre-bid conference. Procurement will transmit to prospective



Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

## 7. SITE AND OTHER AREAS

7.1. The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner, unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

## 8. INTERPRETATIONS AND ADDENDA

8.1. All questions about the meaning or intent of the Bidding Documents are to be submitted to the Sewerage & Water Board Purchasing Department. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda sent to all parties recorded by the office issuing documents as having received the Bidding Documents. Questions received after **November 21, 2024, at 5:00 p.m.** may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

8.2. Addenda may also be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

8.3. Addenda issued in response to questions will be issued no later than 72 hours prior to bid opening.

## 9. BID SECURITY

9.1. Bid shall be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price and in the form of a certified check, bank money order, or a Bid bond (on the attached form), issued by a surety meeting the requirements of Paragraph 5.01 and Paragraph 5.02 of the General Conditions.

9.2. Upon Notice of Award of the Contract, the Bid security of all bidders, other than the lowest two (2) formal bidders will be returned upon request. The return of the Bid security to whom the Contract is awarded is conditioned upon the successful bidder furnishing the insurance required in the specifications and appearance before the Notary for the Sewerage and Water Board of New Orleans within ten (10) consecutive calendar days after notice by the Executive Director or designee of the award of the contract and executing the contract and furnishing bond for the faithful fulfillment thereof according to the attached specifications. The Bid security of the next lowest bidder will be returned as soon as the successful bidder has executed the Contract and furnished bond upon request. If all bid proposals are rejected, all Bid security will be returned immediately upon request.

9.3. Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within 7 days after Bid opening upon request.

## 10. CONTRACT TIMES

10.1. The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

## 11. LIQUIDATED DAMAGES

11.1. Provisions for liquidated damages, if any, are set forth in the Agreement.

## 12. SUBSTITUTE AND “OR-EQUAL” ITEMS

12.1. The Contract will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

## 13. WAGE RATES

13.1. The bidding documents include a Wage Determination for the project based on the current U.S. Department of Labor wage rates obtained from Wage Determinations Online (<https://sam.gov/content/wage-determinations>). The Wage Determination will be rechecked ten days before the bid opening, and if it has been revised, the revised version will be issued to bidders as an addendum.

13.2. The successful bidder is to make available to the Board, complete records in connection with payment of employees during the term of the job in order to permit the Internal Audit Division to check as to adherence to the wage scale presently in effect in accordance with U.S. Government standards.

## 14. PREPARATION OF BID

14.1. Bidders shall prepare bid document to include Louisiana Uniform Public Work Bid Form, Bid Security or Bid Bond; Acknowledgment of Addenda; Base Bid; Alternates (if applicable); Signature of Bidder; Name, Title, and Address of Bidder; Name of Firm or Joint Venture; Corporate Resolution or written evidence of the authority of the person signing the bid; and Louisiana Contractors License Number.

14.2. All blanks on the Louisiana Uniform Public Work Bid Form shall be completed by typing or printing with ink and signed in ink. Erasures or alterations shall be initialed in ink by the person signing the form. A Bid price shall be indicated for each Bid item, unit price item, and alternate listed therein.

14.3. A Bid by a corporation shall be executed in the corporate name by the president or a vice president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.

14.4. A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.

14.5. A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.

14.6. A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.

14.7. All names shall be typed or printed in ink below the signatures.

14.8. The Bid shall contain an acknowledgement of receipt of all Addenda; the numbers of which shall be filled in on the Bid Form.

14.9. Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

14.10. The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number and class, if applicable, shall also be shown on the Bid Form.

## 15. BASIS OF BID; COMPARISON OF BIDS

### 15.1. Total Base Bid:

15.1.1. Bidders shall submit on a lump sum basis as set forth on the Louisiana Uniform Public Work Bid Form.

15.1.2. Bidders shall include a separate price for each alternate described in the Bidding Documents as provided for in the Louisiana Uniform Public Work Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate. In the comparison of Bids, alternates will be applied in the same order as listed in the Bid Form.

### 15.2. Unit Price:

15.2.1. Bidders shall submit a on a unit price basis for each item of Work listed in the Unit Price Bid Table on the Louisiana Uniform Public Work Bid Form.

15.2.2. The total of all prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.

15.2.3. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

15.3. Alternates:

15.3.1. Alternates requiring pricing on the Louisiana Uniform Public Work Bid Form are described in Section 01 11 01, Summary of Work, and in the Bid Form, if applicable.

15.3.2. Indicate on the form the amount to be added or subtracted from the Total Base Bid for alternates described.

15.3.3. Include cost of all related work, including modifying surrounding work to integrate the Work of each alternate.

15.3.4. Alternates listed on form will be reviewed and accepted or rejected at Owner's option. Accepted alternates will be identified in the Agreement if applicable.

16. SUBMISSION OF BID

16.1. The Bidders are to complete and submit the following documents at bid submission:

16.1.1. Louisiana Uniform Public Work Bid Form is to be completed

16.1.2. Bid Security or Bid Bond.

16.1.3. Corporate Resolution or Written Evidence of Authority

16.2. The two (2) lowest bidders will have three (3) working days following the bid opening to submit the following:

16.2.1. Additional Requirements, Bidder Declaration, Guarantees, and Emergency Procedures Document

16.2.2. Attestation Affidavit Form

- 16.2.3. Voluntary Extension
- 16.2.4. Affidavit of Non-Collusion
- 16.2.5. Conflict of Interest Disclosure Affidavit
- 16.2.6. Convicted Felon Affidavit
- 16.2.7. Non-Solicitation Affidavit
- 16.2.8. Form RF-211 Equal Opportunity Employment
- 16.2.9. Form RF-212 Nonsegregated Facilities
- 16.2.10. DBE Forms 1-7
- 16.2.11. EPA Form 5700-49

16.2.11.1. Including one for each Subcontractor/DBE

16.3. A Bid shall be submitted no later than the date and time prescribed, and at the place indicated in the bid document. Enclose Bid in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), name and address of Bidder, and accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED."

**Hard Copy Submission:**

Signed hardcopy of the bid in a sealed envelope

Mark the front envelope with the following:

Solicitation # 2024-SWB-83

Company Name

Company Address

Company Contact Name, Phone Number, and Email Address

Contractor's License Number

Address envelope to:

Sewerage and Water Board of New Orleans

Attn: Prentice Mackyeon

625 St. Joseph St. Rm 133

New Orleans, LA 70165

Fax and email submission will not be accepted.

**Mail or courier specifications:**

The Bidder remains responsible for ensuring that the bid is delivered prior to the submission deadline with a proof of delivery. Failure to meet the submission deadline, irrespective of the mode of delivery, shall result in the rejection of the bid.

- Bid documents should be contained in a sealed envelope and be placed in the shipping envelope or box. If the mailed bid is not contained in a separate sealed envelope, the bidder takes the risk that the envelope may be inadvertently opened and the information compromised.
- Please add the Procurement Analyst’s name in the Attention Line of the shipping label to ensure proper delivery.

16.4. In accordance with LRS 37:2163, Bidders are required to certify they hold an active Contractor’s license and indicate license number on Bid envelope. Bid envelopes received with no Contractor license number will not be opened and will automatically be rejected and considered nonresponsive.

17. OPENING OF BIDS

Bids will be opened on **December 4, 2024, at 1:00 p.m.** at Sewerage and Water Board of New Orleans, 625 St. Joseph Street, Purchasing Conference Room 131, New Orleans, Louisiana and unless obviously nonresponsive, read aloud publicly. The amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids. The bid opening will also be available via teleconference:

## Microsoft Teams meeting

**Join on your computer, mobile app or room device**

**[Join the meeting now](#)**

Meeting ID: 262 483 144 117

Passcode: LJ8MJn

[Download Teams](#) | [Join on the web](#)

**Or call in (audio only)**

[+1 504-224-8698,,166004405#](#) United States, New Orleans

Phone Conference ID: 166 004 405#

18. BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.1. All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

19. EVALUATION OF BIDS AND AWARD OF CONTRACT

19.1. Pursuant to Louisiana Statute 38:2225, a resident Bidder shall be allowed a preference over a nonresident Bidder from a state which gives or requires a preference to Bidders from that state. The preference shall be equal to the preference given or required by the state of the nonresident Bidder.

19.2. Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.

19.3. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

20. NOTARIAL FEE.

20.1. The Contract and Bond shall be signed in the City of New Orleans, before the Notary for the Sewerage and Water Board of New Orleans, by the Contractor in person or by a duly authorized representative. The notarial fee for the execution of the contract shall be paid by the Contractor in accordance with the Notarial Fee Schedule below. The Fee Schedule is subject to change, and Contractor is responsible for any deviations from this Fee Schedule. Contractor shall also be responsible for payment of all recordation costs and photocopying at the rate of \$0.50 per page. All affidavits of acceptance or substantial completion are \$70.00 plus actual recordation costs.

NOTARIAL FEE SCHEDULE

Notarial work for all Sewerage and Water Board of New Orleans construction contracts, requiring to be notarized:

<u>Contract Value</u>	<u>Fee</u>
Under \$1,000.00	\$227.00
\$1,000.00 to \$49,999.99	\$423.00
\$50,000.00 to \$499,999.99	\$1,073.00
\$500,000.00 to \$999,999.99	\$2,304.00
\$1,000,000.00 or over	\$4,608.00

21. CONTRACT SECURITY AND INSURANCE

21.1. Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to bonds and insurance. When Successful Bidder delivers executed Agreement to Owner, it shall be accompanied by such bonds.

22. SIGNING OF AGREEMENT

23.1 The proposal submitted by the staff-recommended bidder will be tentatively selected by the appropriate Sewerage and Water Board Committee meeting. The final award of the contract will be made at the subsequent Board meeting. All prices bid must be held firm for 120 days or until final award of contract by the Board.

23.2 After submittal of required Insurance and Bonds, in form acceptable to the Sewerage and Water Board of New Orleans, the selected Bidder will be authorized by the Executive Director of the Board to appear before the Notary to sign the contract within ten (10) consecutive calendar days from the date of the notice.

## 23. SALES AND USE TAXES

24.1 Applicable state and local sales and use taxes for purchase of materials and supplies furnished under this contract shall be paid by the Contractor. Such taxes shall be included in the lump sum bid for the work of this contract. The board shall be relieved of any obligation to pay these taxes.

## 24. RETAINAGE

24.1. Provisions concerning retainage and Contractor's rights to deposit securities in lieu of retainage, if applicable, are set forth in the Agreement.

## 25. BID PROTESTS

25.1. Any formal protest which is to be made by an aggrieved Proposer must be submitted in writing to the Procurement Director, Cashanna K. Moses at [cmoses@swbno.org](mailto:cmoses@swbno.org) according to Sewerage and Water Board of New Orleans Policy 83(R): Procedural Rules for Bid Appeals.

## 26. PUBLIC RECORDS REQUESTS

26.1. To request a public record for the proposal documents, please submit to the following website: <https://swbno.nextrequest.com/>

**END OF SECTION**



LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Sewerage and Water Board of New Orleans
Purchasing Department, Room 133
625 St. Joseph St
New Orleans, LA 70165

BID FOR: Lead Service Line
Replacement

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by:

and dated:

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following ADDENDA: (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging)

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" \* but not alternates) the sum of:

Dollars (\$ )

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

Dollars (\$ )

Alternate No. 2 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

Dollars (\$ )

NOTE TO BIDDERS: (Insert Applicable Notes if Alternates are required)

NAME OF BIDDER:

ADDRESS OF BIDDER:

LOUISIANA CONTRACTOR'S LICENSE NUMBER:

NAME OF AUTHORIZED SIGNATORY OF BIDDER:

TITLE OF AUTHORIZED SIGNATORY OF BIDDER:

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER \*\*:

DATE:

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

\* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

\*\* A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

# LOUISIANA UNIFORM PUBLIC WORK BID FORM

## UNIT PRICE FORM

**TO:** Sewerage and Water Board of New Orleans  
Purchasing Department, Rm 133  
625 St. Joseph St  
New Orleans, LA 70165

**BID FOR:** CN 2167 – Lead Service  
Line Replacement

**UNIT PRICES:** This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ TRAFFIC MAINTENANCE AGGREGATE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
C402(51)	1200	CY		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPAIR WATERMAIN WITH FULL CIRCLE CLAMP (PIPE SIZE 4"-8")			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
CSW741-01	100	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPAIR WATERMAIN WITH FULL CIRCLE CLAMP (PIPE SIZE 12"-16")			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
CSW741-02	50	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPAIR WATERMAIN WITH BELL JOINT CLAMP (PIPE SIZE 4"-12")			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
CSW741-03	150	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPLACE 5/8" TO 1" LEAD SERVICE LINE WATER HOUSE CONNECTION WITH 1" POLYETHYLENE WATER HOUSE CONNECTION (FROM MAIN TO METER)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
CSW741-09	400	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPLACE 1.5" LEAD SERVICE LINE WATER HOUSE CONNECTION (FROM MAIN TO METER)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
CSW741-10	100	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPLACE 2" LEAD SERVICE LINE WATER HOUSE CONNECTION (FROM MAIN TO METER)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
CSW741-11	100	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ WATER HOUSE CONNECTION INSPECTION			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS1	300	EA		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ CONCRETE (REMOVAL & REPLACEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS2	6000	SY		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ ASPHALT (REMOVAL & REPLACEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS3	3000	SY		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ CONCRETE CURB (REMOVAL & REPLACEMENT) (WITH OR WITHOUT GUTTER)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS4	6000	LF		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ GRANITE/STONE CURB (REMOVAL, STORAGE, & REPLACEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS5	600	LF		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ CONCRETE SIDEWALK (REMOVAL & REPLACEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS6	1200	SY		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ CONCRETE DRIVEWAY (REMOVAL & REPLACEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS7	1800	SY		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ BRICK/DECORATIVE SIDEWALK & DRIVEWAYS (REMOVAL & REPLACEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS8	400	SY		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# __ REPLACE 5/8" TO 2" LEAD SERVICE LINE WATER HOUSE CONNECTION (FROM METER TO PROPERTY LINE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
TS9	300	EA		

**Wording for "DESCRIPTION" is provided by the Owner.**

**All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner**

1-2 ADDITIONAL REQUIREMENTS

All blank spaces in this Proposal section shall be filled. A bid price shall be indicated for each bid item. Bids received without all such items completed will be considered non-responsive. The bid shall contain an acknowledgement of receipt of all Addenda in space provided. The Louisiana Uniform Public Work Bid Form & Unit Price Form (if applicable) and the amount of Deposit or Bid Bond five percent (5%) of the total amount of the proposal is REQUIRED to be submitted in a sealed envelope on bid opening date. The two (2) lowest numerical bidders have three (3) days after the bid opening (exclusive of Saturdays, Sundays and Holidays) to submit any additional information such as (Voluntary Extension Sheet, Affidavit, Economically Disadvantage Business Summary Sheet if applicable) as well as requirements of Sections 1-3 through 1-6 below. Failure to do so will render the bid non-responsive.

1-3 BIDDER DECLARATION

\_\_\_\_\_ do hereby declare that \_\_\_\_\_ the only person \_\_\_\_\_ interested in this proposal and that no other person than the one \_\_\_\_\_ herein named have any interest herein or in the contract proposed to be taken; that it is made without any connection with any other person or persons making proposal for the same work and that it is in all respects fair and without collusion or fraud; also that no member of the Sewerage and Water Board or of the City Council of the City of New Orleans or any officer or employee of the City of New Orleans or of the several boards thereof, who are by law excluded from participation herein, and directly or indirectly interested herein or in furnishing bond or in any portion of the profits hereof.

\_\_\_\_\_ do hereby also declare that \_\_\_\_\_ have LOUISIANA CONTRACTOR'S LICENSE in the field of \_\_\_\_\_ with NUMBER \_\_\_\_\_.

And \_\_\_\_\_ do further declare that \_\_\_\_\_ have carefully examined the annexed specifications and the drawings furnished, and personally inspected the ground and that \_\_\_\_\_ will contract to provide the necessary tools, machinery and apparatus and other means of construction, and to furnish all labor and material specified in this contract or called for by the plans, necessary to complete the work in the manner specified and within the time mentioned in the specifications and according to the requirements of the Engineer, as herein set forth.

1-4 In accordance with Louisiana Revised Statute 38:2227 the following affidavit shown on the next page must be submitted with the bid, or no later than 3 days after the bid opening (excluding Saturdays, Sundays, and Holidays). Failure to do so will render the bid non-responsive. **Please note, THE AFFIDAVIT MUST BE NOTARIZED.**

1-5 GUARANTEES

\_\_\_\_\_ guarantee that the whole of the work under this contract will be substantially completed within **[365]** calendar days after the date of the "Commencement of Contract Times."

In case of delay in the completion of the contract beyond the contract time of completion as determined by the Board hereby agree to pay, as liquidated damages, the sum of **Two Thousand Dollars (\$2,000.00)** for each calendar day of such delay, which liquidated damages shall become due by the mere elapsing of the delay without the necessity of putting \_\_\_\_\_ in default.

1-6 EMERGENCY PROCEDURES

Contractor must furnish telephone numbers for routine or emergency telephone calls.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

TELEPHONE NO.:  
NORMAL CALLS \_\_\_\_\_

EMERGENCY \_\_\_\_\_

**VOLUNTARY EXTENSIONS OF THE AWARD**

If this bid is determined to be the lowest responsive and responsible bid, Bidder agrees to bid extension of the award date by up to two (2) thirty (30) day periods in accordance with the provisions of Louisiana Revised Statute, Title 38, Section 2215 (A).

**AGREED:**

---

**NAME OF BIDDER (TYPE OR PRINT)**

---

**SIGNATURE OF BIDDER**

---

**COMPANY NAME**

**\*\*\* END OF SECTION \*\*\***

**BID BOND**

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

**BID**

Bid Due Date:  
Project (Brief Description Including Location):

**BOND**

Bond Number:  
Date (Not later than Bid due date):

Penal sum \_\_\_\_\_  
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

BIDDER

SURETY

\_\_\_\_\_(Seal)  
Bidder's Name and Corporate Seal

\_\_\_\_\_(Seal)  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

Note: Above addresses are to be used for giving required notice.

\_\_\_\_\_  
**Name of Project**

\_\_\_\_\_  
**Project No.**

**STATE OF** \_\_\_\_\_

**PARISH OF** \_\_\_\_\_

**ATTESTATIONS AFFIDAVIT**

**Before me**, the undersigned notary public, duly commissioned and qualified in and for the parish and state aforesaid, personally came and appeared Affiant, who after being duly sworn, attested as follows:

**LA. R.S. 38:2227 PAST CRIMINAL CONVICTIONS OF BIDDERS**

A. No sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes:

(a) Public bribery (R.S. 14:118)

(c) Extortion (R.S. 14:66)

(b) Corrupt influencing (R.S. 14:120)

(d) Money laundering (R.S. 14:230)

B. Within the past five years from the project bid date, no sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes, during the solicitation or execution of a contract or bid awarded pursuant to the provisions of Chapter 10 of Title 38 of the Louisiana Revised Statutes:

(a) Theft (R.S. 14:67)

(f) Bank fraud (R.S. 14:71.1)

(b) Identity Theft (R.S. 14:67.16)

(g) Forgery (R.S. 14:72)

(c) Theft of a business record  
(R.S.14:67.20)

(h) Contractors; misapplication of  
payments (R.S. 14:202)

(d) False accounting (R.S. 14:70)

(i) Malfeasance in office (R.S. 14:134)

(e) Issuing worthless checks  
(R.S. 14:71)

**LA. R.S. 38:2212.10 Verification of Employees**

A. At the time of bidding, Appearer is registered and participates in a status verification system to verify that all new hires in the state of Louisiana are legal citizens of the United States or are legal aliens.

B. If awarded the contract, Appearer shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

C. If awarded the contract, Appearer shall require all subcontractors to submit to it a sworn affidavit verifying compliance with Paragraphs (A) and (B) of this Subsection.

\_\_\_\_\_  
**Name of Project**

\_\_\_\_\_  
**Project No.**

By signing this bid /proposal, Affiant certifies that no such assessment is in effect against the bidding / proposing entity.

\_\_\_\_\_  
**NAME OF BIDDER**

\_\_\_\_\_  
**NAME OF AUTHORIZED SIGNATORY OF BIDDER**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**TITLE OF AUTHORIZED SIGNATORY OF BIDDER**

\_\_\_\_\_  
**SIGNATURE OF AUTHORIZED  
SIGNATORY OF BIDDER/AFFIANT**

**Sworn to and subscribed** before me by Affiant on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public



NEW ORLEANS MASTER 469936

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2. All Bids are rejected by Owner, or
  - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

**END OF SECTION**



**ATTACHMENT**  
**CONFLICT OF INTEREST DISCLOSURE AFFIDAVIT**

STATE OF \_\_\_\_\_

PARISH/COUNTY OF \_\_\_\_\_

Before me, the undersigned authority, came and appeared \_\_\_\_\_ who, being first duly sworn, deposed and said that:

He/She is the \_\_\_\_\_ and authorized representative of \_\_\_\_\_, hereafter called "Proposer."

The Respondent hereby confirms that a conflict(s) of interest **exists /does not exist/may exist (circle one)** in connection with this solicitation which might impair Respondent's ability to perform if awarded the contract, including any familial or business relationships that the Respondent, the proposed subcontractors, and their principals have with the Board officials or employees. *(If a conflict(s) of interest exists and/or may exist, describe in a letter the nature of the conflict, the parties involved and why there is a conflict. Attach said letter to this form).*

\_\_\_\_\_  
Respondent Representative (Signature)

\_\_\_\_\_  
(Print or type name)

\_\_\_\_\_  
(Address)

SWORN TO AND SUBSCRIBED BEFORE ME  
THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC (Signature)

\_\_\_\_\_  
NOTARY PUBLIC (Print Name)

Notary ID#/Bar Roll # \_\_\_\_\_

**ATTACHMENT**  
**CONVICTED FELON AFFIDAVIT**

STATE OF \_\_\_\_\_

PARISH OF \_\_\_\_\_

Before me, the undersigned authority, came and appeared \_\_\_\_\_,

who, being first duly sworn, deposed and said that:

1. He/She is the \_\_\_\_\_ and authorized representative of \_\_\_\_\_, hereafter called "Contractor."
2. The Contractor complies with City Code Section 2-8 (c) for the City of New Orleans.
3. No Contractor principal, member, or officer has, within the preceding five years, been convicted of, or pled guilty to, a felony under state or federal statutes for embezzlement, theft of public funds, bribery, or falsification or destruction of public records.

\_\_\_\_\_  
Contractor Representative (Signature)

\_\_\_\_\_  
(Print or type name)

\_\_\_\_\_  
(Address)

Sworn to and subscribed before me, in (CITY/STATE) \_\_\_\_\_

this \_\_\_\_ day of (MONTH) \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Notary Identification No./Bar Roll No.

CONVICTED FELON AFFIDAVIT

00 45 54 - 3

**ATTACHMENT**  
**NON-SOLICITATION AFFIDAVIT**

STATE OF \_\_\_\_\_

PARISH OF \_\_\_\_\_

Before me, the undersigned authority, came and appeared \_\_\_\_\_,

who, being first duly sworn, deposed and said that:

1. He/She is the \_\_\_\_\_ and  
authorized representative of \_\_\_\_\_ hereafter called "Contractor."
2. The Contractor has not employed or retained any company or person, other than a bona fide employee working solely for him, to solicit or secure the subject contract. The Contractor has not paid or agreed to pay any person, other than a bona fide employee working for him, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the subject contract.

\_\_\_\_\_  
Contractor Representative (Signature)

\_\_\_\_\_  
(Print or type name)

\_\_\_\_\_  
(Address)

Sworn to and subscribed before me, in \_\_\_\_\_, Louisiana,

this \_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Notary Identification No./Bar Roll No.

NON-SOLICITATION AFFIDAVIT

00 45 54 - 4

## AGREEMENT

THIS AGREEMENT is by and between the Sewerage and Water Board of New Orleans

\_\_\_\_\_  
(Owner) and \_\_\_\_\_

\_\_\_\_\_  
(Contractor).

Owner and Contractor, in consideration of the mutual covenants set forth herein, agree as follows:

1. WORK

1.1. Contractor shall complete the Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

1.1.1. **Inspection and replacement of lead service lines from main to meter.**

2. THE PROJECT

2.1. The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

2.1.1. **This project is part of the Lead Service Line Replacement program.**

3. ENGINEER

3.1. The Project has been designed by [ \_\_\_\_\_ ] (Designer), who is to act as the Engineer-of-Record under the oversight and administration of the Owner's Representative.

4. CONTRACT TIMES

4.1. Time of the Essence: Time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.2. **[A: Days to Achieve Substantial Completion and Final Payment:**

4.2.1. **The Work shall be substantially completed within [ 365 ] calendar days from the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the**

**General Conditions within [ 365 ] calendar days after the date when the Contract Times commence to run.]**

4.3. Liquidated Damages:

4.3.1. Should the Contractor fail to commence or start the work within the time allotted or fail to complete individual phases of the work within the times allotted for said individual phases, the Contractor shall pay to the Board the sum of \$2,000 liquidated damages for each calendar day beyond the times specified. If unforeseen circumstances are encountered at the work site, the Contractor may request in writing an extension in days for the completion of work. If granted, the extension of time must be approved in writing by the Engineer and submitted with the invoice.

4.4. Night, Weekend, or Holiday Work

4.4.1. Night, weekend or holiday work which requires the presence of an engineer or inspector will not be permitted except in cases of emergency or by permission of the Engineer. Except in cases of emergency, all requests for night, weekend or holiday work shall be submitted in writing at least seven calendar days prior to the work being performed. Any approved night, weekend or holiday work requires prior written authorization from the Engineer

5. CONTRACT PRICE

5.1. Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to the prices stated in Contractor's Bid attached hereto as an exhibit.

6. PAYMENT PROCEDURES

6.1. Submittal and Processing of Payments: Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.2. Progress Payments and Retainage: Owner will make progress payments on account of the Contract Price on the basis of Contractor's Application for Payment on the date of each month as established in the preconstruction conference during performance of the Work as provided herein. All such payments will be measured by the Schedule of Values established as provided in Paragraph 2.07 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided in the General Requirements.

6.2.1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:

6.2.1.1. Ninety-five percent of Work completed for contracts in the amount of \$500,000.00 or greater (with the balance being retainage).  
Ninety percent of Work completed for contracts in an amount less than \$500,000.00 (with the balance being retainage).

6.2.2. In accordance with Louisiana Statute 38:2249, Contractor may withdraw up to the entire retained amount if they deposit an equal amount in a Certificate of Deposit issued by a commercial bank or savings and loan located in Louisiana.

6.2.3. In accordance with Louisiana Statute 38:2248.A, retainage will be released within 45 days of Final Acceptance by the SWBNO Board of Directors.

6.2.4. Upon Substantial Completion, Owner will pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts as Engineer will determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

### 6.3. Final Payment:

6.3.1. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner will pay the remainder of the Contract Price as recommended by Engineer as provided in Paragraph 14.07.

## 7. CONTRACTOR'S REPRESENTATIONS

### 7.1. Contractor makes the following representations:

7.1.1. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

7.1.2. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.



7.1.3. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

7.1.4. Contractor has carefully studied: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) if any, which have been identified in Paragraph 4.02 of the Supplementary Conditions as containing reliable “technical data”, and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site which have been identified in Paragraph 4.06 of the Supplementary Conditions as containing reliable “technical data.”

7.1.5. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on 1) the cost, progress, and performance of the Work; 2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and 3) Contractor’s safety precautions and programs.

7.1.6. Based on the information and observations referred to above, Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

7.1.7. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

7.1.8. Contractor has given Engineer written notice of conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

7.1.9. The Contract Documents are generally sufficient to indicate and convey understanding of terms and conditions for performance and furnishing of the Work.

## 8. CONTRACT DOCUMENTS

### 8.1. Contents:

8.1.1. The Contract Documents that are attached to this Agreement (except as expressly noted otherwise) consist of the following:

8.1.1.1. This Agreement.

8.1.1.2. Performance bond .

8.1.1.3. General Conditions

8.1.1.4. Supplementary Conditions

8.1.1.5. Specifications as listed in the table of contents

8.1.1.6. Drawings consisting of [ ] sheets with each sheet bearing the following general title: [ “ ”.]

8.1.1.7. Addenda

8.1.2. Exhibits to this Agreement (enumerated as follows):

8.1.2.1. Contractor’s Bid.

8.1.3. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:

8.1.3.1. Notice to Proceed.

8.1.3.2. Work Change Directives.

8.1.3.3. Change Order(s).

8.2. There are no Contract Documents other than those listed above in this Article.

8.3. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

## 9. MISCELLANEOUS

9.1. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

9.2. Successors and Assigns: Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

9.3. Severability: Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and remaining

provisions shall continue to be valid and binding upon Owner and Contractor, who agree the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.4. Assignment of Contract:

9.4.1. No assignment by a party hereto of any rights under or interests in the Contract shall be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment shall release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.5. Contractor's Certifications:

9.5.1. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this paragraph:

9.5.1.1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in Contract execution;

9.5.1.2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract Price at artificial noncompetitive levels, or (c) to deprive Owner of the benefits of free and open competition;

9.5.1.3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, noncompetitive levels; and

9.5.1.4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in triplicate. One counterpart each has been delivered to Owner, Contractor, and Engineer. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf.

This Agreement will be effective on \_\_\_\_\_, 20\_\_ (which is the Effective Date of the Agreement).

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

[CORPORATE SEAL]

[CORPORATE SEAL]

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address for giving notices:  
\_\_\_\_\_  
\_\_\_\_\_

Address for giving notices:  
\_\_\_\_\_  
\_\_\_\_\_

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

License No. \_\_\_\_\_

(Where applicable)

Agent for service or process: \_\_\_\_\_  
\_\_\_\_\_

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

**END OF SECTION**

# PAYMENT AND PERFORMANCE BOND

---

Bond No.:

KNOW ALL PERSONS BY THESE PRESENTS, That we, \_\_\_\_\_, as principal, (hereinafter called the "Principal"), and \_\_\_\_\_, as surety, (hereinafter called the "Surety"), are held and firmly bound unto \_\_\_\_\_, as Obligee, in the sum of \_\_\_\_\_ Dollars (\$) for the payment whereof said Principal and Surety bind themselves, jointly and severally, as provided herein.

WHEREAS, the Principal has entered into a Contract with Obligee dated \_\_\_\_\_, to perform construction work for \_\_\_\_\_ ("Contract").

NOW, THEREFORE, the condition of this obligation is such that if Principal shall promptly and faithfully perform the Construction Work to be performed under the Contract, and shall promptly make payment to Claimants, as hereinafter defined, for all labor and material actually used, consumed or incorporated in the performance of the Construction Work under the Contract, then this obligation shall be null and void; otherwise to remain in full force and effect.

Surety's obligations hereunder to Obligee shall not arise unless Principal is in default under the Contract for failing to perform the Construction Work and has been declared by Obligee to be in default under the Contract for failing to perform the Construction Work; and Obligee has performed its obligations under the Contract. In such event, Surety shall have a reasonable period of time to:

1. Upon entering into an acceptable written takeover agreement with Obligee, undertake to perform and complete the Construction Work to be done under the Contract; or
2. Obtain bids or negotiated proposals from qualified contractors for a contract for completion of the Construction Work to be done under the Contract, arrange for a contract to be prepared for execution by Obligee and contractor, to be secured with performance and payment bonds executed by a qualified surety; or
3. Waive its right to perform or complete the Construction Work pursuant to paragraphs 1 and 2 above, and with reasonable promptness under the circumstances: (a) After investigation, determine the amount for which it may be liable to the Obligee and, as soon as practicable after the amount is determined, tender payment therefor to the Obligee; or (b) Deny liability in whole or in part and notify the Obligee citing reasons therefor.
4. The Contract balance, as defined below, shall be credited against the reasonable construction cost of completing the Construction Work to be performed under the Contract. If completed by Obligee pursuant to paragraphs 2 or 3 above, and the reasonable construction cost of completing the Construction Work exceeds the Contract balance, Surety shall pay to Obligee such excess, but in no event shall the aggregate liability of Surety exceed the amount of this bond. If Surety completes the work pursuant to paragraph 1 above, that portion of the Contract balance as may be required to complete the Construction Work to be done under the Contract and to reimburse Surety for its outlays shall be paid to Surety at the times and in the manner as said sums would have been payable to Principal had there been no default under the Contract. To the extent that Surety's outlays exceed the Contract

balance paid to Surety by Obligee, Surety shall be entitled to a dollar for dollar reduction of its liability under this bond, and Surety's aggregate liability shall not exceed the penal sum of this bond. The term "Contract balance" as used herein shall mean the total amount payable by Obligee under the Contract and any amendments thereto, less the amounts properly paid by Obligee to Principal under the Contract. The term "Construction Work" as used herein shall mean the providing of all labor and/or material necessary to complete Principal's scope of work under the Contract. Notwithstanding any language in the Contract to the contrary, the Contract balance shall not be reduced or set off on account of any obligation, contractual or otherwise, except the reasonable construction cost incurred in completing the Construction Work.

5. Any suit by Obligee under this bond must be instituted before the earlier of: (a) the expiration of one year from the date of substantial completion of the Construction Work, or (b) one year after Principal ceased performing the Construction Work, excluding warranty work. If the public works bond statutes in the location where the Construction Work is being performed contains a statute of limitations for suits on the performance bond, then the limitation period set forth herein shall be read out of this bond and the statute of limitation set forth in the public works bond statutes shall be read into this bond. If the limitation set forth in this bond is void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable, and said period of limitation shall be deemed to have accrued and shall commence to run no later than (y) the date of substantial completion of the Construction Work, or (z) the date Principal ceased performing Construction Work, excluding warranty work, whichever occurs first.

6. A Claimant is defined as one other than Obligee having a contract with Principal or with a direct subcontractor of Principal to supply labor and/or materials and said labor and/or material is actually used, consumed or incorporated in the performance of the Construction Work under the Contract.

7. Principal and Surety hereby jointly and severally agree with Obligee that every Claimant as herein defined who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labor was done or performed or materials were furnished by such Claimant, may bring suit on this bond, prosecute the suit to final judgment for the amount due under Claimant's contract for the labor and/or material supplied by Claimant which was actually used, consumed or incorporated in the performance of the Construction Work, and have execution thereon; provided, however, that a Claimant having a direct contractual relationship with a subcontractor of Principal shall have a right of action on this bond only if said Claimant notifies Surety in writing of its claim within ninety (90) days from the date on which said Claimant did or supplied the last labor and/or materials for which the claim is made. Obligee shall not be liable for the payment of any costs or expenses of any such suit.

8. No suit or action shall be commenced hereunder by any Claimant after the expiration of the earlier of: (a) one year after the day on which Claimant last supplied the labor and/or materials for which the claim is made; or (b) the limitation period set forth in the public works bond statutes, if any, in the location where the construction work is being performed. Any limitation contained in this bond which is prohibited by any law controlling in the state where the suit is filed shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by the law of that state, and said period of limitation shall be deemed to have accrued and shall commence to run on the day Claimant last supplied the labor and/or materials for which the claim is made.

9. No suit or action shall be commenced hereunder by Obligee or any Claimant other than in a state court of competent jurisdiction in the county or other political subdivision of the state in which the project,

or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.

10. The amount of this bond shall be reduced by and to the extent of any payment or payments made by Surety in good faith hereunder whether made directly to Obligee or Claimant(s) or otherwise in discharge of Principal's obligations. Surety's liability hereunder to Obligee and all Claimants is limited, singly, or in the aggregate, to the penal sum of the bond set forth herein. Surety may, at its option, discharge all obligations under this bond by interpleading into the registry of any court of competent jurisdiction of the full unused penal sum of this bond, or such portion thereof that will satisfy the obligations owed to Obligee and/or Claimant(s). No right of action shall accrue on this bond to any person or entity other than Obligee and/or Claimant(s). The bond shall not afford coverage for any liability of Principal for tortious acts, whether or not said liability is direct or is imposed by the Contract and shall not serve as or be a substitute for or supplemental to any liability or other insurance required by the Contract.

11. This bond is provided to comply with all statutory (including but not limited to La. R.S. 38:2216 and La. R.S. 38:2219) or other legal requirement for performing construction contracts for public owners in the location where the construction work is being performed. Except as provided in paragraphs 5 and 8 above, all provisions in the bond which are in addition to or differ from those statutory or legal requirements shall be read out of this bond, and all pertinent statutes and other legal requirements shall be read into the bond. This bond is a statutory bond, not a common law bond.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(Principal)

By: \_\_\_\_\_

(Surety)

By: \_\_\_\_\_, Attorney-in-Fact

# GENERAL CONDITIONS

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## GENERAL CONDITIONS

### ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

#### 1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*—The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*—See Paragraph 11.01 for definition.

17. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*—The individual or entity named as such in the Agreement.

20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*—Sections of Division 1 of the Specifications.

22. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.

23. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*—Polychlorinated biphenyls.

31. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.

37. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

38. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

39. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

40. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

41. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

42. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

43. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

44. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.

45. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.

46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.

47. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.

48. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

49. *Unit Price Work*—Work to be paid for on the basis of unit prices.

50. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided

under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

51. *Work Change Directive*—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

## 1.02 Terminology

A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

### B. *Intent of Certain Terms or Adjectives:*

1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

### C. *Day:*

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective:*

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents; or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
- c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. *Furnish, Install, Perform, Provide:*

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

**ARTICLE 2 – PRELIMINARY MATTERS**

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2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference; Designation of Authorized Representatives*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the

Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

**ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE**

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3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees,

from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

### 3.03 *Reporting and Resolving Discrepancies*

#### A. *Reporting Discrepancies:*

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

#### B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

- a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not

specifically incorporated by reference in the Contract Documents); or

- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

### 3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;
2. Engineer's approval of a Shop Drawing or Sample (subject to the provisions of Paragraph 6.17.D.3); or
3. Engineer's written interpretation or clarification.

### 3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions; or

2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.



### 3.06 *Electronic Data*

A. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

## **ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS**

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### 4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as

necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

### 4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and

2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

### 4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

5. then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer’s Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner’s obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer’s findings and conclusions.

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor’s cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor’s making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data;

b. locating all Underground Facilities shown or indicated in the Contract Documents;

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated:*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and

shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous

Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to

be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

## **ARTICLE 5 – BONDS AND INSURANCE**

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### *5.01 Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of

authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

#### 5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

#### 5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.

E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's

liability under the indemnities granted to Owner in the Contract Documents.

#### 5.04 *Contractor's Insurance*

A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of

whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

6. include completed operations coverage:

a. Such insurance shall remain in effect for two years after final payment.

b. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

#### 5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

#### 5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;

2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the

interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

#### 5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and

Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

#### 5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of

Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to

Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

**ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES**

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6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water,



sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

#### 6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by

Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and

3) it has a proven record of performance and availability of responsive service.

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

#### 2. *Substitute Items:*

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

- a) perform adequately the functions and achieve the results called for by the general design,
- b) be similar in substance to that specified, and
- c) be suited to the same use as that specified;

2) will state:

- a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time,
- b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
- c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services; and

4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

*B. Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

*C. Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

*D. Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

*E. Engineer's Cost Reimbursement:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

*F. Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor

2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

#### 6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

#### 6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

#### 6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

#### 6.11 *Use of Site and Other Areas*

##### A. *Limitation on Use of Site and Other Areas:*

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members,

partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

*B. Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

*C. Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

*D. Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

#### 6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

#### 6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with

applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.

D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

F. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities,

dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples:*

- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Submittal Procedures:*

1. Before submitting each Shop Drawing or Sample, Contractor shall have:

- a. reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
- b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
- c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
- d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and

procedures of construction, and safety precautions and programs incident thereto.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

*D. Engineer's Review:*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

*E. Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected

copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

#### 6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

#### 6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.



## **ARTICLE 7 – OTHER WORK AT THE SITE**

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### *7.01 Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

### *7.02 Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

### *7.03 Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.

C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

## **ARTICLE 8 – OWNER'S RESPONSIBILITIES**

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### *8.01 Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### *8.02 Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

8.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents.

8.12 *Compliance with Safety Program*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

**ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION**

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9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but

without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

**ARTICLE 10 – CHANGES IN THE WORK; CLAIMS**

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.D.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

#### 10.04 *Notification to Surety*

A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

#### 10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part;
2. approve the Claim; or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

### **ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

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#### 11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include,

without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and

temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.

C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

## 11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances:*

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. *Contingency Allowance:*

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

## 11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the

estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect to any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

## **ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES**

### *12.01 Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and



f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

#### 12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

#### 12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be

Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

### **ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

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#### 13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

#### 13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

#### 13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

#### 13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise

impair Owner's special warranty and guarantee, if any, on said Work.

### 13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such

correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

### 13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

### 13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct, or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all

materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

## **ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION**

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### 14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

### 14.02 *Progress Payments*

#### A. *Applications for Payments:*

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract

Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

#### B. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently

discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or

d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

*C. Payment Becomes Due:*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

*D. Reduction in Payment:*

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

c. there are other items entitling Owner to a set-off against the amount recommended; or

d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to

Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.

#### 14.03 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

#### 14.04 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected)

reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

#### 14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify

Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

#### 14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.07 *Final Payment*

##### A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

- a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
- b. consent of the surety, if any, to final payment;
- c. a list of all Claims against Owner that Contractor believes are unsettled; and
- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien

rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

##### B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

##### C. *Payment Becomes Due:*

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

#### 14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of

Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

#### 14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

### **ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION**

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#### 15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

#### 15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's repeated disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere; and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.



D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

#### 15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

#### 15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

### **ARTICLE 16 – DISPUTE RESOLUTION**

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#### 16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become

final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions; or
2. agrees with the other party to submit the Claim to another dispute resolution process; or
3. gives written notice to the other party of the intent to submit the Claim to a court of competent jurisdiction.

## **ARTICLE 17 – MISCELLANEOUS**

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### *17.01 Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or
2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

### *17.02 Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

### *17.03 Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

### *17.04 Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

### *17.05 Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

### *17.06 Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

## SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof. The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix “SC” added thereto.

SC-1.01. Add the following language at the end of Paragraph 1.01.A.19:

Engineer is the General Superintendent for the Sewerage and Water Board of New Orleans or delegate and has the authority provided in this Contract to approve or disapprove all changes to the Contract documents.

SC-1.01. Add the following language at the end of Paragraph 1.01.A.44:

Substantial Completion is further defined as (i) that degree of completion of the Project’s operating facilities or systems sufficient to provide Owner the full time, uninterrupted, and continuous beneficial operation of the Work; and (ii) required functional, performance and acceptance, or startup testing has been successfully demonstrated for components, devices, equipment, and instrumentation and control to the satisfaction of Engineer in accordance with the requirements of the Specifications.

SC-1.01. Add the following new paragraphs immediately after Paragraph 1.01.A.51:

1.01.A.52. *Specialist*—The term Specialist refers to a person, partnership, firm, or corporation of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the Contract Documents, or otherwise performing Work required by the Contract Documents. Where the Specifications require the installation by a Specialist, that term shall also be deemed to mean either the manufacturer of the item, a person, partnership, firm, or corporation licensed by the manufacturer, or a person, partnership, firm, or corporation who will perform the Work under the manufacturer’s direct supervision.

1.01.A.53. *Construction Coordinator*—The term Construction Coordinator, where and when used, refers to an authorized representative of Owner or Engineer who may be assigned to the Site or any part thereof to monitor and oversee construction activities by Contractor. Synonymous with Resident Project Representative (RPR) and Owner’s Representative.

1.01.A.54 *Owner's Representative*—The term Owner's Representative, where and when used, refers to an authorized representative of Owner who may be assigned to the Site or any part thereof to monitor and oversee construction activities by Contractor. Synonymous with Resident Project Representative (RPR) and Construction Coordinator.

1.01.A.55 *Abnormal Weather Conditions* – Weather that could not have been reasonably anticipated, based on previous weather history over the past 3 years, such as rainfall or lightning at the Site, which, as mutually agreed in writing by the Contractor Representative and Owner Representative, that reasonably prevents a significant majority of the planned Work at the Site from being safely executed, and which therefore requires Contractor to evacuate or stand down fifty percent (50%) (or more) of Contractor's direct craft workforce for a Day.

1.01.A.57 *Liquidated Damages* -The damages the Owner will incur if the Project is not completed within the Contract Time(s) specified.

1.01.A.58 *Material Breach* - Any substantial, unexcused non-performance. The breach is either failing to perform an act that is an important part of the transaction or performing an act inconsistent with the terms and conditions of the contract.

1.01.A.59 36. *Request for Information (RFI)* - A written request, from the Contractor to the Engineer that asks for additional information or to clarify some aspect of the project, such as procedures, equipment, materials, specification details or drawing details.

SC-2.01. Delete the wording “and Owner” and “each” in lines 2 and 7 in Paragraph 2.01.B

SC-2.02. Amend first sentence in Paragraph 2.02.A to read as follows:

2.02.A. Upon award of Contract, Owner will furnish Contractor with complete conformed project documents (Drawings and Project Manual) in electronic format.

SC-2.03. Delete the wording “on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given”. Delete the third sentence of Paragraph 2.03.A in its entirety.

SC-2.05. Replace Paragraphs 2.05.A.1 and 2.05.A.2 with the following:

2.05.A.1 an Initial Construction Baseline Schedule and Schedule Narrative Report in accordance with the Contract documents, indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2.05.A.2 a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting it in keeping with the General Requirements and a tentative procurement

schedule of equipment and materials

SC-2.07. Delete Paragraph 2.07.A.1 and replace with the following:

2.07.A.1 The Preliminary Progress schedule, Detailed Baseline Schedule, and Detailed Progress Schedule(s) will be acceptable to Engineer if: (a) it is prepared by personnel having substantial experience in the use of the latest version of Oracle Primavera software unless approved otherwise by Owner; (b) it provides a reasonable allocation of the Contract to component parts of the Work; and (c) it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on the Owner or Engineer's responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility.

SC-3.01. Add the following new paragraph immediately after Paragraph 3.01.C:

3.01.D. Sections of Division 01, General Requirements, govern the execution of the Work of all sections of the Specifications.

SC-4.02. Add the following new paragraph(s) immediately after Paragraph 4.02.B:

4.02.C. The following reports, if any, of explorations and tests of subsurface conditions at or contiguous to the Site are known to Owner:

**4.02.C.1. [\_\_\_\_]**

4.02.D. The following drawings of physical conditions, if any, relating to existing surface and subsurface structures at the Site (except Underground Facilities) are known to Owner:

**4.02.D.1. Record drawings of the Main Water Purification Plant.**

4.02.E. Copies of reports and drawings itemized in SC-4.02.C and SC-4.02.D that are not included with Bidding Documents may be examined at Owner's offices during regular business hours. These reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Contractor may rely, as expressly identified and established above, are incorporated in the Contract Documents by reference. Contractor is not entitled to rely upon any other information and data known to or identified by Owner.

SC-4.06. Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following in their place:

4.06.A. No reports or drawings related to Hazardous Environmental Conditions are known to Owner.

SC-5.01. Delete in Paragraph 5.01.A first sentence the wording "and payment"

SC-5.02. Add the following new paragraph immediately after Paragraph 5.02.A:

SC-5.02.B. As an alternative to the requirements in paragraph A above, bonds may also be provided by a Louisiana Domiciled Insurance company with at least an A.M. Best's Financial Strength Rating of A minus (A-) rating, or the bond shall be written by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds. In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the State of Louisiana. Surety and insurance companies from which the bonds and insurance for this Project are purchased under the provisions of paragraph 5.02.A shall have an A.M. Best's Financial Strength Rating of A minus (A-) or better with a Financial Size Category of no less than VII, in addition to other requirements specified herein.

SC-5.04. Add the following language after Paragraph 5.04.B.1:

Policies will endorse the following parties or entities as additional insured:

5.04.B.1.a. Sewerage and Water Board of New Orleans, 625 St. Joseph Street, New Orleans, Louisiana 70165

5.04.B.1.b. The City of New Orleans, 1300 Perdido Street, New Orleans, Louisiana 70112

5.04.B.1.c. [REDACTED]

5.04.B.1.d. [REDACTED]

5.04.B.1.e. [REDACTED].

SC-5.04. Add the following new paragraph immediately following Paragraph 5.04.B:

5.04.C. Insurance: General Requirements

The Contractor will maintain, at his own cost and expense, and in good standing, such insurance as will protect the Sewerage and Water Board of New Orleans (the Board), the City of New Orleans (the City,) their officers, officials, employees, boards, commissions and volunteers, as well as the Contractor himself and any subcontractors from and against any and all claims for damages to public and private property and personal injury, including death, to employees or to the public, which may arise from any operations under this Contract or any of its subcontracts. The coverage will contain no special limitations on the scope of protection afforded to the Board and the City. Both the Board and the City will appear as "Additional Insured" on all Commercial General Liability and Business Automobile Liability. Any failure to comply with the reporting provisions of a policy will not affect coverage provided to the Board and the City, their officers, officials, employees, boards and commissions and volunteers. The Contractor's insurance will apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

In general, insurance is to be placed with insurers with an A.M. Best's rating of A:V, although this requirement may be reviewed and modified by the Risk Manager of the Sewerage and Water Board of New Orleans in the best interest of the Board. The Risk Manager may also consider performing such review upon written request from the Contractor. The Contractor shall furnish the Sewerage and Water of New Orleans with certificates of insurance affecting coverage required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates of insurance are to be received and approved by the Risk Manager of the Sewerage and Water Board of New Orleans, 625 St. Joseph St., Rm. 119, New Orleans, LA 70165, before work commences. The Sewerage and Water Board of New Orleans reserves the right to require complete, certified copies of all insurance policies at any time, as proof that the insurance placed meets the requirements of this Contract.

If the insurance is written subject to a deductible clause, Contractor assumes responsibility for the amount of the deductible. In addition, the Contractor shall be required to furnish to the Risk Manager of the Sewerage and Water Board of New Orleans all copies of investigative reports with regard to any and all claims with the Contractor and his insurance carriers, relative to the contract, with the exception of claims filed with his Workers' Compensation Insurance. Such reports shall include dates, location and description of loss as well as amounts of settlements or judgments in order that annual aggregate limits maybe monitored by the Sewerage and Water Board of New Orleans for the Contactor's compliance with these Specifications.

The furnishing of insurance as provided above shall not relieve the Contractor of his responsibility for losses not covered by insurance. All policies shall be with insurance companies authorized to do business in Louisiana and shall remain in full force and effect until the final completion of the work and acceptance thereof by the authority of the Board.

#### 5.04.C.1 Subrogation

The Contractor, Subcontractor(s), and their insurers shall agree to waive all the rights of subrogation against the Board, the City, and their officers, officials, employees, boards and commissions, and volunteers for losses arising from work performed by the Contractor for the Board and the City.

#### 5.04.C.2. Insurance Cancellations and Stop-Work

Each insurance policy required by this contract shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after thirty (30) days prior written notice has been given to the Risk Manager, 625 St. Joseph St., Rm. 119, New Orleans, LA 70165, of the Sewerage & Water Board of New Orleans, via certified mail.

The Contractor and/or his insurer shall notify the Risk Manager of the Sewerage and Water Board of New Orleans at least thirty (30) days in advance of any insurance coverage to be canceled or of any insurance

coverage that will expire. The Contractor shall simultaneously furnish the Board evidence of new coverage to be effective the same day and hour of the expired or canceled coverage.

In the event the Contractor and/or his insurer fails to submit this evidence of new coverage five (5) days prior to the cancellation date or expiration date of any policy or policies, the Sewerage and Water Board will have the right to obtain the required coverage to become effective on the date of cancellation or expiration of said policies. The cost of such new policies shall be at the expense of the Contractor and any expenditure incurred by the Board for this coverage will be deducted from any balance due to the Contractor.

Should the Board be unable to secure new coverage to take the place of the expired or cancelled policy or policies, a “stop work” order will issued and all work on the contract shall cease on the same date and hour as the coverage ceases. Should the Contractor fail or refuse to secure coverage within five (5) days after the date of the “stop work” order, the Contractor shall be declared to be in default, and the contract between the parties shall be considered cancelled and of no force or effect between the parties reserving all the rights of the Board against the Contractor and his surety.

#### 5.04.C.3. Insurance Policies, Endorsements, and Limits Required

The following are the types of insurance policies and the minimum limits of insurance coverage which shall be maintained by the Contractor during the entire term of the Contract:

##### 5.04.C.3.a. WORKERS’ COMPENSATION AND EMPLOYERS LIABILITY INSURANCE

WORKERS’ COMPENSATION AND EMPLOYERS LIABILITY INSURANCE, as will protect Contractor from claims under Louisiana Workers’ Compensation Laws. The Workers’ Compensation section of the policy shall afford Statutory Limits and be in accordance with all Louisiana Workers’ Compensation Statutes. The Employers Liability limit shall not be less than \$3,000,000 each accident for bodily injury by accident and \$3,000,000 each employee/policy limit for bodily injury by disease. Whenever any Federal Longshoreman’s and Harbor Workers’ Act, and shall also include protection for injuries and/or death to Master and Members of the crews of vessels with statutory limits in accordance with the Jones Act.

##### 5.04.C.3.b. COMMERCIAL GENERAL LIABILITY INSURANCE



COMMERCIAL GENERAL LIABILITY INSURANCE, with a limit of not less than \$2,000,000 each occurrence and not less than \$4,000,000 general annual aggregate, including Explosion, Collapse, and Underground Property Damage Hazards. The Products-Completed Operations aggregate limit shall not be less than \$2,000,000 each occurrence. The general aggregate limit shall apply separately to this project.

#### 5.04.C.3.c. BUSINESS AUTOMOBILE LIABILITY INSURANCE

BUSINESS AUTOMOBILE LIABILITY INSURANCE, which shall cover liability arising out of accidents involving any auto (including Owned, Hired, and Non-Owned autos). The limit of liability shall not be less than \$1,000,000 each accident for all injuries, property damage, and/or death resulting from any one occurrence.

#### 5.04.C.3.d. OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY INSURANCE

OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY INSURANCE, as will protect the Contractor, the Sewerage and Water Board of New Orleans, and the City of New Orleans from and against any and all claims and lawsuits involving vicarious liability. The limits of liability shall be the same as specified in Paragraph (b) above, and shall include Explosion, Collapse and Underground Hazards.

#### 5.04.C.3.e. PROFESSIONAL LIABILITY INSURANCE

PROFESSIONAL LIABILITY INSURANCE, as may be applicable to the particular profession or service to be provided, with a limit of not less than \$2,000,000 each Claim, with at least a \$4,000,000 annual aggregate, **without any restrictive "negligent act, negligent error, or negligent omission"** clause, and sufficient to protect the Contractor, the Board, and the City, for a five (5) year period from completion of this contract, against any and all claims which may arise from the Contractor's negligent performance of work described herein.

#### 5.04.C.3.f. PROPERTY INSURANCE

PROPERTY INSURANCE, required on all work except sewer and water drainage pipelines, reinforced concrete canals, work completely underground, and similar work (however Contractor is not relieved of responsibility therefore) as follows:

5.04.C.3.f(1).

ALL RISKS BUILDERS RISK INSURANCE (covering Fire, Extended Coverage, Vandalism and Malicious Mischief) will be carried on a completed value or reporting form, for not less than 100 percent of the value of the work, including foundations.

Coverage will include all machinery and equipment to be installed, whether furnished by the Sewerage & Water Board or by Contractor, for not less than 100 percent of the installed value of the machinery and equipment. This insurance shall be written in the same Insurance Company carrying the Builder's Risk Insurance, shall include testing and startup, shall for partial utilization of the Work by Owner, and shall terminate only when installation has been accepted by the Sewerage and Water Board.

The All Risks Builder's Risk Policy shall include the names of the Sewerage & Water Board of New Orleans, and City of New Orleans, and will cover the interests of all sub-contractors without specifically naming them.

#### 5.04.C.3.g. WORKERS' COMPENSATION AND UNEMPLOYMENT COVERAGE, ADDITIONAL CONDITIONS

##### 5.04.C.3.g(1)

WORKERS' COMPENSATION: The Contractor expressly agrees and acknowledges that it is an "independent contractor" as defined in LSA-R.S.23:1021(6), and that its employees shall not be considered employees of the Board for workers' compensation benefits or coverage.

##### 5.04.C.3.g(2)

EXCLUSIVE OF UNEMPLOYMENT COMPENSATION COVERAGE: Contractor herein expressly agrees and acknowledges that it is an "independent contractor" as defined in LSA-R.S.23:1472(E0), that neither the contractor nor any one employed by the Contractor shall be considered an employee of the Board for the purpose of employment of compensation coverage.

SC-5.06. Delete Paragraph 5.06.A in its entirety.

SC-5.06. Delete Paragraph 5.06.B in its entirety.

SC-5.06. Delete Paragraph 5.06 E in its entirety.

SC-5.07. Delete third sentence of Paragraph 5.07.A in its entirety and insert the following in its place:

Contractor and Contractor's insurers waive all rights against Owner and their respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused.

SC-5.07. Delete the last sentence of Paragraph 5.07.A in its entirety and insert the following in its place:

None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Contractor as trustee or otherwise payable under any policy so issued.

SC-5.07. Delete Paragraph 5.07.B in its entirety.

SC-5.07. Delete Paragraph 5.07.C in its entirety.

SC-5.08. Delete Paragraph 5.08.A in its entirety.

SC-5.08. Delete Paragraph 5.08.B in its entirety.

SC-6.01. Delete Paragraph 6.01 in its entirety and replace with the following:

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The

resident superintendent shall be a full-time employee of the Contractor. The Owner may, at its sole discretion, require replacement of the superintendent, in which case Contractor shall submit an acceptable replacement at no increase in Contract Price nor extension in Contract Times. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor.

C. Contractor shall ensure that all employees performing or furnishing any of the Work will be prohibited from using firearms, engaging in hunting, fishing, trapping, using illegal drugs or using alcohol either on the work site, on Owner property, or on any land adjoining the work site.

D. Contractor shall ensure that all employees performing or furnishing any of the Work will be prohibited from trespassing on any land adjoining the work site

SC-6.02. Delete Paragraph 6.02.A in its entirety and replace with the following:

6.02.A Contractor shall provide competent, qualified personnel to perform construction as required by the Contract Documents. Contractor shall employ a Professional Land Surveyor with current Louisiana registration to survey and lay out the work (in accordance with any additional provisions included in the General Requirements). Contractor is fully responsible to provide a sufficient number of skilled workers and supervisory personnel to perform the Work and ensure that the Work is completed within the Contract Time. Failure to fully man the Project with supervisory personnel and skilled workers shall be cause for termination of Contractor.

SC-6.02. Add the following new paragraph immediately after Paragraph 6.02.B:

6.02.C. Contractor shall reimburse Owner for Engineer's additional extraordinary costs for onsite personnel overtime work resulting from Contractor's overtime operations. Reimbursement shall be on the cost basis defined in Paragraph 14.02.D.4 of these Supplementary Conditions.

SC-6.03. Add the following new paragraphs immediately after Paragraph 6.03.C:

6.03.D. Manufacturers' or Suppliers' warranties for all materials products and equipment to be furnished by Contractor and to be incorporated into the completed Work shall be furnished to the Owner through Contractor. Contractor shall obtain from Suppliers of all materials, products and equipment, complete information as to any special condition or restriction to be applied in the use of these items. Should the manner or method of installation, specified performance or test results as set forth in the Specifications be contrary to the Manufacturer's recommendations for use of the product, Contractor shall notify the Engineer in writing of such conflict as soon as reasonably possible, but no later than the time of Shop Drawing submittal including those products. Failure to provide such written notice before

proceeding with the Work affected thereby shall be certification by Contractor that the specification requirements will be met by the materials, products and equipment, and that the cost and time required to perform the Work affected thereby have been included in the Contract Price and in the schedule for the performance of the Work within the Contract Time.

6.03.E. Domestic Manufacture:

6.03.E.1. All equipment to be furnished and components of all items specified herein, except bearings, shall be of domestic produce, manufacture and assembly, i.e., manufactured and assembled within the limits of the United States. Parts must be available from suppliers that manufacture components in the USA. The Board reserves the right to waive this requirement if, in the opinion of the Engineer, it appears to be in the best interests of the Board.

6.03.E.2. Sewerage and Water Board staff will determine the ability of the lowest bidder to design and build the equipment and machinery specified hereon. Along with other factors to be considered by Sewerage and Water Board staff will be the manufacturer's facilities, listings of similar equipment and installations, equipment reliability and longevity. Should the lowest bidder be found "non-responsive", then an informal hearing will be held to provide the lowest bidder the opportunity to refute the reasons for disqualification.

SC-6.04. Add the following language at the end of Paragraph 6.04.A.1:

Contractor further hereby acknowledges that the Contract Times for performance is reasonable and that all costs for schedule compliance are included in the Contract Price.

SC-6.04. Add the following language at the end of Paragraph 6.04.A.2

The Contractor shall not alter the schedule for proposed substitutions, delays, or claims in anticipation of a Change Order, but rather will provide a proposed schedule revision with the Change Order, if requested by the Engineer, which will become effective with approval of the change.

SC-6.05. Add the following language at the end of Paragraph 6.05.E:

Reimbursement rates for Engineer or their officers, directors, members, partners, employees, agents, and other consultants and subcontractors for evaluation of proposed substitutes shall be on the basis established in Paragraph 14.02.D.4 of these Supplementary Conditions.

SC-6.06. Add the following new paragraph immediately after Paragraph 6.06.G:

6.06.H. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

SC-6.08. Add the following language:

6.08 Permits:

A. Before commencing work, the Contractor shall obtain, at his own expense, any required permits from the City of New Orleans. The Contractor shall also secure, at his own expense, any necessary inspection certificates required after the work is completed.

B. Evidence of compliance shall be furnished to the Board prior to starting work, in the case of permits, or within 10 calendar days after completion of that work requiring inspection certificates.

SC-6.11. Add the following language to the end of Paragraph 6.11.A.1:

Contractor shall not enter upon nor use property not under Owner control until appropriate easements have been executed and a copy is on file at the Site.

SC-6.13. Add the following new paragraphs immediately after 6.13.C:

6.13.C.1. The Owner's Safety Orientation Notice is applicable to the Work and is appended to these Supplementary Conditions.

6.13.C.2. The Owner's Drug-Free Workplace Policy is applicable to the Work and is appended to these Supplementary Conditions.

6.13.C.3. Owner's Safety Clearance Procedure

**Definitions:**

**Operator:** The Board employee who is onsite and in responsible charge of the operation of the plant, station, or other facility.

**Out of Service:** The electrical/mechanical disconnection of equipment which is to remain inoperable.

**Power Dispatcher:** The shift employee on duty at Central Control at the time safety clearance occurs.

**Signee:** The person who actually tags-out equipment for safety clearance.

**Supervisor/Foreman:** The Board employee who is the supervisor/foreman in responsible charge of the repair/maintenance of one or more work locations which requires safety clearance. This person may not necessarily be "onsite" at any particular location.

**Tag-out:** The physical tagging of equipment by an operator for the purpose of disabling equipment.

**Lock-out:** The physical locking of equipment by an operator for the purpose of disabling equipment.

### **General Provisions**

1) All equipment repair/maintenance work which is scheduled and requires safety clearance should be presented to Central Control at the beginning of each work day by the supervisor/foreman/electrical engineer in charge of the repair/maintenance. Twenty four (24) hour advance notice of scheduled work for major outages is desirable; however, it is understood that due to the nature of the services provided by the Board this preferred notice may not be possible for every safety clearance.

2) In cases where two or more crafts are working on, or require safety clearance on the same equipment, the supervisor/foreman/electrical engineer for each craft must follow the appropriate safety clearance procedure and the equipment must be tagged out for each craft's signee. No equipment can be tested and/or restored to service until all tags have been removed in accordance with the tag removal procedure.

3) When an operator requests service for equipment at an unmanned facility, i.e. an unmanned sewer station or unmanned underpass station, from either Electrical Maintenance or Mechanical Maintenance, the appropriate maintenance department shall request the responsible operator to tag-out the equipment. When the appropriate maintenance department, in the course of servicing this equipment, requires restoration of power, the appropriate maintenance department shall contact the responsible operator directly (if operator is present) or by radio or telephone (if operator is absent) and request that the responsible operator grant his permission. If the power is to be restored for only a short duration, the appropriate maintenance department shall thereafter contact the operator for permission to either remove power or restore power, as often as needed. The operator shall log each request. If the request to restore power is for a short duration only, and the operator does not received contact from the appropriate maintenance personnel to remove power again, the operator shall make every attempt to contact the appropriate maintenance personnel in order to ensure that no accident has occurred.

4) If equipment must remain "Out of Service" upon completion of the onsite work, the signee must request their tag be replaced with an "Out of Service" tag in the name of their department: e.g. "Out of Service - Electrical Maintenance", in addition it must be physically locked-out by that department. However the "Out of Service" tag does not relinquish the responsibility of following the safety clearance procedure each day that piece of equipment is worked on.

5) Any equipment restored to service after being tagged "Out of Service" must be tested through operational test procedures. The signee must remain, when possible, on-site until testing is complete.

6) Any individual involved in these procedures may halt the procedure at any time if it is felt the safety of the personnel and/or equipment warrants said stoppage, or if conditions within the system change that may require postponement of the work.

7) In the event the responsible person, signee, leaves the job site without releasing the cleared equipment and is unreachable to release their tag-out the following procedure must be enacted before the signees name, tag-out, can be removed from the cleared equipment.

a) Cause must be established by the senior power dispatcher giving reason to remove the tag-out.

b) Senior power dispatcher must receive orders from the Chief of Operations or higher, in his absence, to remove said tag-out.

c) Concurrence given by a senior representative of the following:

- Department or company to which the signee works for.
- Senior representative of the plant, station, facility in which the tag-out occurs.
- If jobsite is in the field then, inspection by Electrical Engineering assuring work has halted for the day.

d) Once all areas have been satisfied then the senior power dispatcher may have the signees tag-out removed.

**NOTE: The above and following procedures may be deviated from above at the discretion of the power dispatcher in cases of emergency.**

SC-6.11. Add the following language to the end of Paragraph 6.11.D:

6.11.D. *Water and Other Utilities.* It is the responsibility of the Contractor to make all necessary arrangements for the provision of water, electricity, drainage, sanitary sewage disposal, gas, compressed air, and any other utility service required to prosecute the work of this contract. Water used by the Contractor at the job site will be furnished by the Board at no cost to the Contract, if conditions permit. Costs of all other services shall be borne by the Contractor.

6.11.E. *Hydrant Connections.* Connections to fire hydrants shall only be made with meters obtained from the Sewerage and Water Board Customer Service Department, 504-585-2097, which shall record water usage for record purposes and which shall be returned to the Board as a condition of acceptance of the Contract. Application for the meter requires a \$1,500.00 deposit that is refundable upon return of the meter in undamaged and operable condition. The hydrant meter application and instructions are available on the Sewerage and Water Board website: [https://www.swbno.org/custserv\\_information\\_docs.asp](https://www.swbno.org/custserv_information_docs.asp).

SC-6.17. Add the following new paragraphs immediately after Paragraph 6.17.E.1:

6.17.E.2. Contractor shall furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than the number of submittals specified in Paragraph 14.02.D.4 of these Supplementary



Conditions. Engineer will record time for reviewing subsequent submittals of Shop Drawings, Samples, or other items requiring approval and Contractor shall reimburse Owner for Engineer's charges for such time in accordance with Paragraph 14.02.D.4 of these Supplementary Conditions.

6.17.E.3. In the event Contractor requests a substitution for a previously approved item, Contractor shall reimburse Owner for Engineer's charges for such time, unless the need for such substitution is beyond the control of Contractor.

SC-7.02. Delete Paragraphs 7.02.A and 7.02.B in their entirety and insert the following in their place:

7.02.A. Owner intends to contract with others for the performance of other work on the Project at the Site. The authority and responsibility of the Construction Coordinator for the various prime contractors, utility owners, and Owner (if present at the Site) shall be as follows:

7.02.A.1 Owner's Representative: Shall have authority and responsibility for coordination of the various contractors at the Site. Owner's Representative shall be named by the Owner if necessary.

7.02.A.2. Specific matters to be covered by such authority and responsibility: Prioritization of work activity should conflicts occur in work areas between contractors or between contractor and Owner's operations; approval of requests to curtail, interrupt, or otherwise disrupt Owner operation to allow Contractor work to be scheduled and/or occur; cancellation of scheduled Contractor activity in the event Owner requirements supersede prior plans; other issues that require approval or prioritization relative to interference with Owner operations or conflicts with other.

7.02.A.3. Extent of such authority and responsibility: Owner's Representative decision and direction to Contractor shall be final. Planning and discussions to coordinate options relative to operational disruptions requested by Contractor will be scheduled by Owner's Representative. Owner's Representative will review and respond to requests by the Contractor for outage, interconnection, operational disruption, contract activity prioritization, or the like, within 10 business days.

7.02.A.4. Limitations of such authority and responsibility: Owner's Representative may not modify the Contract or its terms and conditions.

7.02.B. Unless expressly assigned to the Construction Coordinator, all other authority and responsibility will remain vested with each prime contractor, utility owner, or Owner (if present at the Site).

SC-7.04. Add the following new paragraph immediately after Paragraph 7.03:

SC-7.04. *Claims Between Contractors*

7.04.A. Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor, Owner, Engineer, or the Construction Coordinator, if applicable, Contractor shall (without involving Owner, Engineer, or Construction Coordinator) either i) remedy the damage; ii) agree to compensate the other contractor for remedy of the damages; or iii) remedy the damages and attempt to settle with such other contractor by agreement, or to otherwise resolve the dispute by arbitration or at law.

7.04.B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Engineer, the Construction Coordinator (if applicable) and the officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all Claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any other contractor against Owner, Engineer, their officers, directors, members, partners, employees, agents, and other consultants and subcontractors, or the Construction Coordinator (if applicable) to the extent said Claim is based on or arises out of Contractor's performance of the Work. Should another contractor cause damage to the Work or property of Contractor or should the performance of work by any other contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner, Engineer, or the Construction Coordinator (if applicable) or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner, Engineer, or the Construction Coordinator (if applicable) on account of any such damage or Claim.

7.04.C. If Contractor is delayed at any time in performing or furnishing the Work by any act or neglect of another contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 12. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner, Engineer, and Construction Coordinator (if applicable) for any delay, disruption, interference, or hindrance caused by any other contractor. This paragraph does not prevent recovery from Owner, Engineer, or Construction Coordinator (if applicable) for activities that are their respective responsibilities.

SC-8.02. Delete Paragraph 8.02.A in its entirety and replace with the following:

8.02.A. In case of termination of the employment of Engineer, Owner shall appoint an Engineer whose status in the Contract Documents shall be that of the former Engineer.

SC-8.06. Delete Paragraph 8.06.A in its entirety.

SC-8.11. Delete Paragraph 8.11.A in its entirety.

SC-9.03. Add the following new paragraphs immediately after Paragraph 9.03.A:

9.03.B. Resident Project Representative (RPR) will be furnished by Owner. The responsibilities, authority, and limitations of the RPR are limited to those of Engineer in accordance with Paragraph 9.09 and as set forth elsewhere in the Contract Documents and are further limited and described below.

9.03.C. Responsibilities and Authority:

9.03.C.1. Schedules: Review and monitor Progress Schedule, Schedule of Submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.

9.03.C.2. Conferences and Meetings: Conduct or attend meetings with Contractor, such as preconstruction conferences, progress meetings, Work conferences and other Project related meetings.

9.03.C.3. Liaison: (i) Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, and assist in understanding the intent of the Contract Documents; (ii) assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's onsite operations; (iii) assist in obtaining from Owner additional details or information when required for proper execution of the Work.

9.03.C.4. Interpretation of Contract Documents: Inform Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

9.03.C.5. Submittals: Receive submittals that are furnished at the Site by Contractor, and notify Engineer of availability for examination. Advise Engineer and Contractor of the commencement of any Work or arrival of materials and equipment at Site, when recognized, requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.

9.03.C.6. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and provide recommendations to Engineer; transmit to Contractor, in writing decisions as issued by Engineer.

9.03.C.7. Review of Work and Rejection of Defective Work: (i) Conduct onsite observations of the Work in progress to assist Engineer in determining if the Work is, in general, proceeding in accordance with the Contract Documents; (ii) inform Engineer and Contractor whenever RPR believes that any Work is defective; (iii) advise Engineer whenever RPR believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged or does not meet the

requirements of any inspection test, or approval required to be made; and advise Engineer of that part of the Work in progress that RPR believes should be corrected or rejected or uncovered for observation, or requires special testing, inspection, or approval.

9.03.C.8. Inspections, Tests, and System Startups: (i) Verify tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; (ii) observe, record, and report to Engineer appropriate details relative to the test procedures and system startups; and (iii) accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.

9.03.C.9. Records: (i) Maintain records for use in preparing Project documentation; (ii) keep a diary or log book recording pertinent Site conditions, activities, decisions and events; (iii) record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of Contractors, Subcontractors, and major Suppliers of materials and equipment.

9.03.C.10. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

9.03.C.12. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify materials and equipment certificates and operation and maintenance manuals and other data required by Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents been delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

9.03.C.13. Completion: (i) Participate in a Substantial Completion inspection; assist in determination of Substantial Completion and the preparation of lists of items to be completed or corrected; (ii) Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied; and (iii) observe whether items on final list have been completed or corrected, and make recommendations to Engineer concerning acceptance.

9.03.D. Limitations of Authority: Resident Project Representative will not:

9.03.D.1. have authority to authorize a deviation from Contract Documents or substitution of materials or equipment, unless authorized by Engineer; or

9.03.D.2, exceed the limitations of Engineer's authority as set forth in Contract Documents; or

9.03.D.3. undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's authorized representative; or

9.03.D.4. advise on, issue directions relative to, or assume control over an aspect of the means, methods, techniques, sequences, or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents; or

9.03.D.5 advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor; or

9.03.D.6. participate in specialized field or laboratory tests or inspections conducted offsite by others, except as specifically authorized by Engineer; or

9.03.D.7. accept Shop Drawings or Samples from anyone other than Contractor; or

9.03.D.8. authorize Owner to occupy the Project in whole or in part.

SC-9.09. Add the following new paragraph immediately after Paragraph 9.09.E:

9.09.F. Contractors, Subcontractors, Suppliers, and others on the Project, or their sureties, shall maintain no direct action against Engineer, its officers, employees, affiliated corporations, and subcontractors, for any Claim arising out of, in connection with, or resulting from the engineering services performed. Only the Owner will be the beneficiary of any undertaking by Engineer.

SC-10.03. Add the following new paragraphs immediately after Paragraph 10.03.A.3.

10.03.A.4. An executed Change Order shall be in accord and satisfaction concerning all potential claims related to the Change Order work including inefficiencies or acceleration-based claims.

10.03.A.5. There shall be no Contractor delay claim based upon Contractor's inability to perform Change Order work due to delay caused by Owner's approval process.

SC-10.05. Delete Paragraphs 10.05.C through 10.05.E in their entirety and insert the following in their place and renumber Paragraph 10.05.F to read 10.05.D:

10.05.C. Engineer's Action and Executive Negotiation:

10.05.C.1. Engineer's Action:

10.05.C.1.a. Engineer will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. Engineer's written decision

on such Claim, dispute or other matter will be final and binding upon Owner and Contractor, unless within 10 days after issuance of Engineer's written decision, either party appeals the decision by giving the other party and Engineer written notice of request for executive negotiation.

10.05.C.1.b. In the event Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

10.05.C.2. Executive Negotiation:

10.05.C.2.a. Within 10 days of the delivery of notice of appeal to Engineer's written decision regarding Claim, dispute or other matter, senior representatives of at least Owner and Contractor, having authority to settle the dispute, and Engineer shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.

10.05.C.2.b. In the event a mutually acceptable decision cannot be reached through executive negotiation within 20 days of the appealing party's notice, or mutually agreeable longer period, or if the party receiving such notice will not meet within 10 days, Owner or Contractor may make a written declaration, delivered to the other party and Engineer, that the executive negotiation is deemed unsuccessful and may initiate further dispute resolution measures in accordance with Article 16.

10.05.C.2.c. If no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to further appeal Engineer's written decision shall be delivered by Owner or Contractor to the other and to Engineer within 30 days after the date upon which the executive negotiation has been declared unsuccessful, or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by Owner and Contractor), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

SC-11.01. Delete Paragraph 11.01.A.5.c in its entirety and insert the following in its place:

11.01.A.5.c. Construction Equipment and Machinery:

11.01.A.5.c(1) Rentals of construction equipment and machinery, and the parts thereof in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. Such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery,

or parts shall cease when the use thereof is no longer necessary for the Work.

11.01.A.5.c(2) Costs for equipment and machinery owned by Contractor will be paid at a rate shown for such equipment in the Rental Rate Blue Book published by Equipment Watch. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs. Costs will include the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of such equipment or machinery, or parts thereof, shall cease to accrue when the use thereof is no longer necessary for the changed Work. Equipment or machinery with a value of less than \$1,000 will be considered small tools.

SC-11.01. Add the following language to the end of Paragraph 11.01.A.5.h:

Express and courier services must be approved prior to use.

SC-11.01. Add the following language to the end of Paragraph 11.01.A.5.i:

Any and all notarial fees for the execution of the contract shall be paid by the Contractor. Contractor shall also be responsible for payment of all recordation costs and photocopying.

SC-11.01. Delete paragraph 11.01.B.1 and insert the following in its place:

11.01.B.1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, project managers, assistant project managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

SC-11.01. Delete Paragraph 11.01.C in its entirety.

SC-11.01. Add the following language after Paragraph 11.01.5:

6. At the Pre-construction conference, the Contractor shall certify to the Engineer the following:

- a. A listing of on-site clerical staff, supervisory personnel and their pro-rated time assigned to the Contract,
- b. Actual cost of fringe benefits specified in Paragraph 11.01.1 of the General Requirements, and,
- c. Existence of employee benefit plan for Holiday, Sick and Vacation benefits and a Retirement Plan.

Such certification must be made by an officer or director of the Contractor with authority to bind the Contractor. Timely certification is a condition precedent to any right of the Contractor to recover compensations for such costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such costs. Any subsequent changes shall be certified to the Engineer as part of the cost proposal or seven calendar days in advance of performing such extra work.

SC-11.02. Delete Paragraph 11.02 in its entirety.

SC-12.01. Add the following language to the end of Paragraph 12.01.C.2.c:

except, the maximum total allowable cost to Owner shall be the Cost of the Work plus a maximum collective aggregate fee for Contractor and tiered Subcontractors of 20 percent;

SC-12.01. Add the following new paragraph immediately after Paragraph 12.01.C:

12.01.D. *Right to Audit:* The Contractor will submit to any SWBNO audit, inspection, and review and, at the SWBNO's request, will make available all documents relating or pertaining to this Contract maintained by or under the control of the Contractor, its employees, agents, assigns, successors and subcontractors, during normal business hours at the Contractor's office or place of business in Louisiana. If no such location is available, the Contractor will make the documents available at a time and location that is convenient for the SWBNO.

Administrative and financial records shall be made and kept by the contractor in accordance with generally accepted accounting principles and practices. Records shall include, but are not limited to, accounting records, daily reports, change order requests, correspondences and subcontract files (hard copies as well as computer readable data, if it can be made available). Records must be retained and made available upon request for a minimum of five (5) years following completion or formal acceptance of the contracted project.

The Contractor will abide by all provisions of City Code § 2-1120, including but not limited to City Code § 2-1120(12), which requires the Contractor to provide



the Office of Inspector General with documents and information as requested. Failure to comply with such requests shall constitute a material breach of the Contract. The Contractor agrees that it is subject to the jurisdiction of the Orleans Parish Civil District Court for purposes of challenging a subpoena.

SC-12.02. Add the following sentences immediately after Paragraph 12.02.B: “

12.02.C In order to be entitled to an increase in time for performance of the Work, Contractor must establish that its critical path of construction performance has been adversely impacted. Upon such a showing, Contractor shall be entitled only to such an extension equivalent to such actual adverse impact in the critical path.

SC-12.03 – Add the following language at the end of Paragraph 12.03.C:

If Abnormal Weather Conditions are the basis for a claim for additional time, such claim shall be documented by data substantiating that (1) weather conditions were abnormal for the period of time, (2) the abnormal weather could not have been reasonably anticipated, and (3) that weather conditions had an adverse effect on the scheduled construction path and could not be reasonably mitigated.

SC-13.03. Add the following language at the end of Paragraph 13.03:

Inspections, tests, or observations by Engineer, Owner, or its agents may be performed at its discretion, to provide information to the Owner on the progress of the Work. However, such information is not intended to fulfill the Contractor’s obligations in accordance with the Contract Documents.

SC-13.03. Delete Paragraph 13.03.B in its entirety and insert the following in its place:

13.03.B. Contractor shall employ an independent testing laboratory or testing agency and shall be responsible for arranging and shall pay for specified tests, inspections, and approvals required for Owner’s and Engineer’s acceptance of the Work at the Site except:

13.03.B.1. costs incurred in connection with tests or inspections pursuant to Paragraph 13.04 shall be paid for as provided in said paragraph; and

13.03.B.2. as otherwise specifically provided in the Contract Documents.

SC-13.03. Add the following language at the end of Paragraph 13.03.D:

Tests required by Contract Documents to be performed by Contractor that require test certificates be submitted to Owner or Engineer for acceptance shall be made by an independent testing laboratory or agency licensed or certified in accordance with Laws and Regulations and applicable state and local statutes. In the event state license or certification is not required, testing laboratories or agencies shall meet the following applicable requirements:

13.03.D.1. Basic requirements of ASTM E329, “Standard Specification for Agencies Engaged in Construction Inspection, Special Inspection, or Testing Materials used in Construction” as applicable.

13.03.D.2. Calibrate testing equipment at reasonable intervals by devices of accuracy, traceable to the National Institute of Standards and Technology or accepted values of natural physical constants.

SC-13.07. Amend the first sentence of 13.07.A to read as follows:

13.07.A If within no less than one year after the date of Final Acceptance by the Sewerage and Water Board of New Orleans (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents), any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor’s use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner’s written instructions...

SC-13.07. Delete Paragraph 13.07.C. in its entirety.

SC-14.02. Delete Paragraph 14.02.C.1 in its entirety and insert the following in its place:

14.02.C.1. Forty-Five days after presentation of the Application for Payment to Owner with Owner’s Representative’s recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due and when due will be paid by Owner to Contractor.

SC-14.02. Add the following new paragraph(s) immediately after Paragraph 14.02.D.3:

14.02.D.4. Items entitling Owner to retain set-offs from the amount recommended, including but not limited to:

14.02.D.4.a. Owner compensation to Engineer at an estimated average rate of \$21s0 per each extra personnel hour for labor plus expenses, if applicable, because of the following Contractor-caused events:

14.02.D.4.a.(2). return visits to manufacturing facilities to witness factory testing or retesting;

14.02.D.4.a.(3). Submittal review in excess of two reviews by Engineer for substantially the same submittal, in accordance with Paragraphs 6.17.E.2 and 6.17.E.3 of these Supplementary Conditions;

14.02.D.4.a.(4). evaluation of proposed substitutes and making changes to Contract Documents occasioned thereby, in accordance with Paragraph 6.05.E of these Supplementary Conditions;

14.02.D.4.a.(5). Overtime worked by Contractor necessitating Engineer, and their officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each, Resident Project Representative or Resident Project Representative's Site staff, if any, to work extraordinary overtime in accordance with Paragraph 6.02.C. of these Supplementary Conditions.

14.02.D.4.b. Liability for liquidated damages incurred by Contractor as set forth in the Agreement.

SC-14.06. Add the following new paragraph immediately after Paragraph 14.06.A:

14.06.B. In accordance with Louisiana Statute 38:2248, punch lists will include cost estimate for each item of work identified by Engineer based on mobilization, labor, materials, and equipment costs of correcting each punch list item. Completed punch list items will be paid upon expiration of 45-day lien period.

SC-14.07. Delete Paragraph 14.07.C.1 in its entirety and insert the following in its place:

14.07.C.1. Forty-five days after presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and, will be paid by Owner to Contractor.

The percentage of the value of the work done, as stated in Paragraph 14.02.A.3 of the General Conditions, will be withheld by the Board for a period of not less than forty-five (45) consecutive calendar days after the contract has been accepted by the Board, and such acceptance has been recorded in the Office of the Recorder of Mortgages for the Parish of Orleans. At the end of the forty-five (45) day period, the percentage withheld by the Board, will be paid to the Contractor, less any sums that may be legally deducted under any provisions of this contract, upon the Contractor or furnishing the Board with a certificate from the Recorder of Mortgages for the Parish of Orleans, certifying that the contract is clear of all liens and privileges.

SC-14.10. Add the following new paragraph immediately Paragraph 14.09.2:

SC-14.10 *Maintenance Period*. The maintenance period under this contract, except as otherwise specifically provided for herein, shall be for a period of forty-five (45) consecutive calendar days beginning from the day after the contract has been accepted by the Board, and such acceptance has been recorded in the Office of the Recorder of Mortgages for the Parish of Orleans. During the maintenance period the Contractor will repair, at his own expense, all defects in the work that may arise, to the satisfaction of the Engineer. The Contractor shall restore all surfaces for which he is responsible under the specifications, whether unimproved, partially improved, or paved surfaces (See Section B of the General Specifications), and maintain them in good condition to the satisfaction of the Engineer. If the

Contractor should fail or refuse to repair, at his own expense, any defects in structures or surfaces developing before the expiration of the aforesaid forty-five (45) days or to adjust satisfactorily any claims for damages to public or private property, the Board shall have the right to continue to hold the retainer and to make the necessary repairs and to satisfy the claims for damages, by such means as the Board shall elect, and to reimburse itself for the cost of these repairs and satisfied claims, out of the said retainer. Any surplus of this retainer will then be paid the Contractor, under the conditions above stated, any deficiency shall be made good by the surety.

SC-15.03.A. Delete the first sentence of Paragraph 15.03.A in its entirety and insert the following in its place:

Upon 7 days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract or any portion of the Contract.

SC-15.04. Delete Paragraph 15.04 in its entirety.

SC-16.01. Delete Paragraph 16.01 in its entirety and insert the following in its place:

SC-16.01 *Meet to Confer and Negotiate*

16.01.A. Engineer's action under Paragraph 10.05.C shall become final and binding 30 days after receipt of written notice of Engineer's action or decision unless, within that time period, Owner or Contractor gives to the other party written notice of intent to submit the Claim to a process of bilateral negotiations as set forth below.

16.01.B. Within 30 days of the delivery of such notice, Owner and Contractor shall meet and confer regarding the Claim. A good-faith effort to negotiate resolution shall be made by both parties.

16.01.C. If the negotiations contemplated by Paragraph SC-16.01.B are unsuccessful, management representatives of Owner and Contractor at least one tier above the individuals who met under SC-16.01.B shall meet, confer, and negotiate within 30 days of the closure of the unsuccessful negotiations.

16.01.D. If the Claim is not resolved by negotiation, Engineer's action under Paragraph 10.05.C shall become final and binding 30 days after termination of the negotiations unless, within that time period, Owner or Contractor:

16.01.D.1. gives to the other party written notice of intent to submit the Claim to a court of competent jurisdiction; or

16.01.D.2. agrees with the other party to submit the Claim to another dispute resolution process.

16.01.E. Notwithstanding any applicable statute of limitations, a party giving notice under Paragraph SC-16.01.D.1 shall commence an action on the Claim within 1 year of giving such notice. Failure to do so shall result in the Claim being time-barred and Engineer's action or denial shall become final and binding.

SC-17.05. Delete Paragraph 17.05 and insert the following in its place:

*17.05. Controlling Law and Jurisdiction*

- A. This Contract is to be governed by the laws of the State of Louisiana
- B. Contractor hereby consents and yields to the jurisdiction of the Civil District Court for the Parish of Orleans and does hereby formally waive any pleas of jurisdiction on account of residence elsewhere.

**END OF SECTION**

ATTACHMENT TO GENERAL SPECIFICATIONS

STATEMENT OF POLICY

It is the policy of the Sewerage and Water Board of New Orleans that all work places associated with its operation, maintenance, improvements, and expansion be kept drug free. In order to insure this, the Sewerage and Water Board has approved the following drug testing policy to be implemented on this contract.

NOTICE

The contractor shall notify all personnel to be employed on this contract that they must submit to drug testing upon the occurrence of any accident, injury, or unsafe and hazardous incident which involves them. Agreement to submit to such drug testing shall be required for the employment of all personnel under this contract.

PENALTIES

Any employee who refuses to agree to testing under this policy or who refuses to be drug tested after the occurrence of any accident, injury or unsafe and hazardous incident which involves them, or who fails to report any such accident, injury or incident within twenty-four (24) hours of its occurrence, shall be deemed incompetent under Paragraph 47 of the General Specifications. Any employee found to have a positive test result after his conformational testing shall be deemed incompetent under Paragraph 47 of the General Specifications. Any employee deemed incompetent under these provisions shall be removed by the contractor from work under this contract and any other current Board contract.

TESTING PROCEDURE

The contractor shall while performing this contract, require any of its employees who are involved in an accident, injury or unsafe and hazardous incident while in the course and scope of their employment, whether vehicular or non-vehicular in nature, to be tested for blood alcohol or drug levels through a laboratory approved by the National Institute for Drug Abuse. Said employee shall provide a testing sample as soon as possible after such accident, injury or incident, but no longer than twenty-four (24) hours from the time of the occurrence. The contractor shall provide copies of the results of the initial testing on the samples involved to the Risk Manager of the Sewerage and Water Board of New Orleans as soon as such results are known. If the initial testing reveals a positive result, the contractor shall forward the remainder of the original testing sample to a second, conformational testing. The Sewerage and Water Board of New Orleans shall consider any result to be positive if it indicates any level which exceeds the levels set forth as follows:

Drug-Free Workplace Policy  
Page 2 of 3

CUT-OFF LEVELS INDICATING POSITIVE TEST RESULTS

The following initial cut-off levels shall be used when screening specimens to determine whether negative or positive:

	<u>Initial Test Level (ng/ml)</u>
Marijuana metabolites	50
Cocaine metabolites	300
Opiate metabolites	300
Phencyclidine (PCP, etc.)	25
Amphetamines	1000
Alcohol	.05% by weight based on grams of alcohol per 100cc of blood
LSD	150
Barbiturates	300
Benzodiazepines	300

Quantitative GC/MS confirmation procedures at the following cut-off values shall be used for the following drugs:

	<u>Confirmatory Test Level (ng/ml)</u>
Marijuana metabolites*	10
Cocaine metabolites**	150
Opiates (Morphine, Codeine)	150
Phencyclidine (PCP, etc.)	25
Amphetamines (amphetamine, Methamphetamine)	300
LSD	150
Barbiturates	300
Benzodiazepines	300
* Delta-9-Tetrahydrocannabinol - 9-Carboxylic Acid	
** Benzoyllecgonine	

Drug-Free Workplace Policy  
Sheet 3 of 3

The contractor shall choose the laboratory to be used for drug testing, and shall identify such laboratory to the Risk Manager of the Sewerage and Water Board prior to receiving approval to start work. All laboratories shall be approved by the National Institute for Drug Abuse.

The contractor shall notify the Board's Risk Manager immediately of the results of any conformational testing.

The Contractor's Senior Project Superintendent working in consultation and conjunction with the Board's Risk Manager and the Board's Engineer, shall determine whether an accident, injury or unsafe or hazardous incident occurred. The Safety Department of the Sewerage and Water Board reserves the right to investigate any such matter and make a complete report to the Executive Director of the Sewerage and Water Board whose decision shall be final.

The Sewerage and Water Board shall not be liable for any cause of action of any employee of the contractor brought against the contractor as a result of this policy. The Sewerage and Water Board shall not be liable for the contractor's failure to stipulate adherence to the terms and conditions of this drug testing policy as a condition of employment of any employee on this contract. The Board shall not release the contractor from his responsibilities under the policy unless failure to adhere to the conditions of this policy shall be a direct result of any action taken by the Board.

These requirements shall be acknowledged by signature of the contractor's authorized representative in the space provided in the "Form of Proposal".



## **Attachment 2 - Safety Orientation Notice**

### **Welcome**

We welcome you to the S&WB and request your assistance in maintaining our Safety Standards. For the safety of yourself and everyone working at the S&WB, you are asked to observe the following safety precautions. When this notice has been read thoroughly, a senior representative of your company is required to distribute this information to all employees who will be affected. You may call the Board's Risk Management Department at (504) 585-2382 if you have any questions.

### **Basic**

1. Smoking will be allowed in designated areas only.
2. Horseplay, practical joking and fighting are positively prohibited.
3. The use or possession of illegal drugs or intoxicating beverages is strictly prohibited on all S&WB property.
4. Housekeeping is a must. We will keep our area safe and free from litter and expect you do to the same.
5. Handrails must always be used when going up and down ladders or stairs.
6. When working in confined spaces, the contractor must be in full compliance with Occupational Safety and Health Administration (OSHA) Standard # 29CFR 1910.146 at all times. Atmospheric conditions such as adequate ventilation, the presence of oxygen and the absence of explosive gases must be assured before working in voids, tanks, or other enclosed spaces.
7. Radios must be turned off.
8. S&WB reserves the right to issue a stand down to Contractor's if necessary to address repeated safety issues or concerns or poor housekeeping. Stand downs may range from a few hours up to a full workday.

### **Emergency**

9. The S&WB Emergency Response Plan is a document, which provides specific notification instructions to be followed in case of hazardous material spills. The Board's Environmental Affairs Office phone number is 942-3855 during normal business hours 7:30 a.m. to 4:00 p.m.
10. The Board's 24-hour emergency lines are (504) 529-2837 and 865-0575 (Central Control Dispatcher, Carrollton Plant.)
11. Since Board contracts are performed under various circumstances at various locations, prior to beginning any work, the contractor should consult with the Board employee who is responsible for monitoring the contract in order to establish the most effective procedures for handling emergencies.

## **Transportation**

12. Warning signals and lights shall be used as follows:
13. Rotating beacons shall be used if your vehicle is so equipped.
14. Tail lights / emergency flashers shall be used.
15. Orange reflector type safety cones shall be placed to give other motorists warning.
16. If vehicle is moving, backing, or parking, proper traffic control shall be exercised.

## **Protective Clothing and Equipment**

17. All personnel who are exposed to eye hazards will wear safety glasses. Hard hats will be worn at all times while an employee is in the immediate vicinity of overhead hazards or while operating heavy equipment without a Rollover Protection Device.
18. Protective clothing and equipment such as rubber aprons and gloves, eye and face protection, approved respirators or dust masks will be worn when handling all harmful chemicals.

## **Reporting**

19. Defective equipment, machinery, hazardous conditions, or unsafe work practices or conditions shall be reported immediately to your Supervisor / Foreman who will then contact proper S&WB personnel for corrections.
20. All injuries will be reported to the Risk Manager, (504) 585-2422, or to the Safety Unit, (504) 585-2522, regardless of how minor an injury may seem.
21. S&WB employees may hold safety meetings to discuss and promote safe working conditions and accident prevention. You may be asked to attend.
22. In case of incident, Contractors shall follow S&WB Incident Reporting Protocols provided in Attachment 2A.

## **Work Smart**

23. Stay alert at all times, know what is going on around you. Know the safe operating procedures concerned with your assigned duties. When your duties may influence the safety of Board employees, notify the employees and their supervisors first.
24. Vendor / Contractors shall at all times demonstrate strict compliance with all Federal, State and Local regulations regarding safety, including but not limited to, all relevant Department of Environmental Quality (DEQ), Department of Transportation (DOT), Environmental Protection Agency (EPA), and Occupational Safety and Health Act (OSHA) regulations.
25. The Vendor / Contractor will at the request of the Risk Manager and/ or Safety Manager

remove any of his employees found to be creating or contributing to unsafe conditions.

26. The following items are not allowed on any S&WB Facility or jobsite:

- Firearms and Ammunition
- Alcohol and illegal drugs

## **Attachment 2A - SWBNO Incident Response and Reporting Protocols**

This document constitutes SWBNO Incident Reporting Protocols as referenced in *Attachment 2 - Safety Orientation Notice* of the Supplementary Conditions. In case of an incident, these protocols shall be followed in addition to those that are part of the Contractor's Safety Program and of which SWBNO has been informed.

SWBNO incident response and reporting protocols may be categorized into three phases: **Phase 1 - Stop Work and Make Safe, Phase 2 - Stand Down, and Phase 3 - Investigation and Reporting**. A flowchart of these protocols is provided in Exhibit 1. Contacts shown thereon shall be identified in coordination with SWBNO and the Owner's Construction Manager (CM) for inclusion in the *Contractor's Safety Plan*. A blank contact list, to be prepared and submitted in Contractor's Safety Plan, is provided in Exhibit 2. An Initial Incident Report template is provided as Exhibit 3.

### **Phase 1 - Stop Work and Make Safe (Immediate Response)**

- Ensure personnel are removed from danger, safe, and accounted for.
- **STOP WORK** and take actions to **MAKE SAFE**.
- In case of injury, immediately call Central Control and they will dispatch 911. Proceed with treatment of injuries that do not require emergency services.
- Provide immediate notifications to the Owner's Construction Manager (CM) and affected SWBNO personnel. See contact list.
- Once the situation is made safe and there is not an imminent threat to personnel, property, or environment, **STAND DOWN**.
- Do not continue work until an initial incident investigation has been conducted by the Owner's CM and SWBNO personnel.
- Conduct Drug Testing as required by SWBNO Policy.
- Conduct additional activities as may be documented in Contractor's Safety Program.

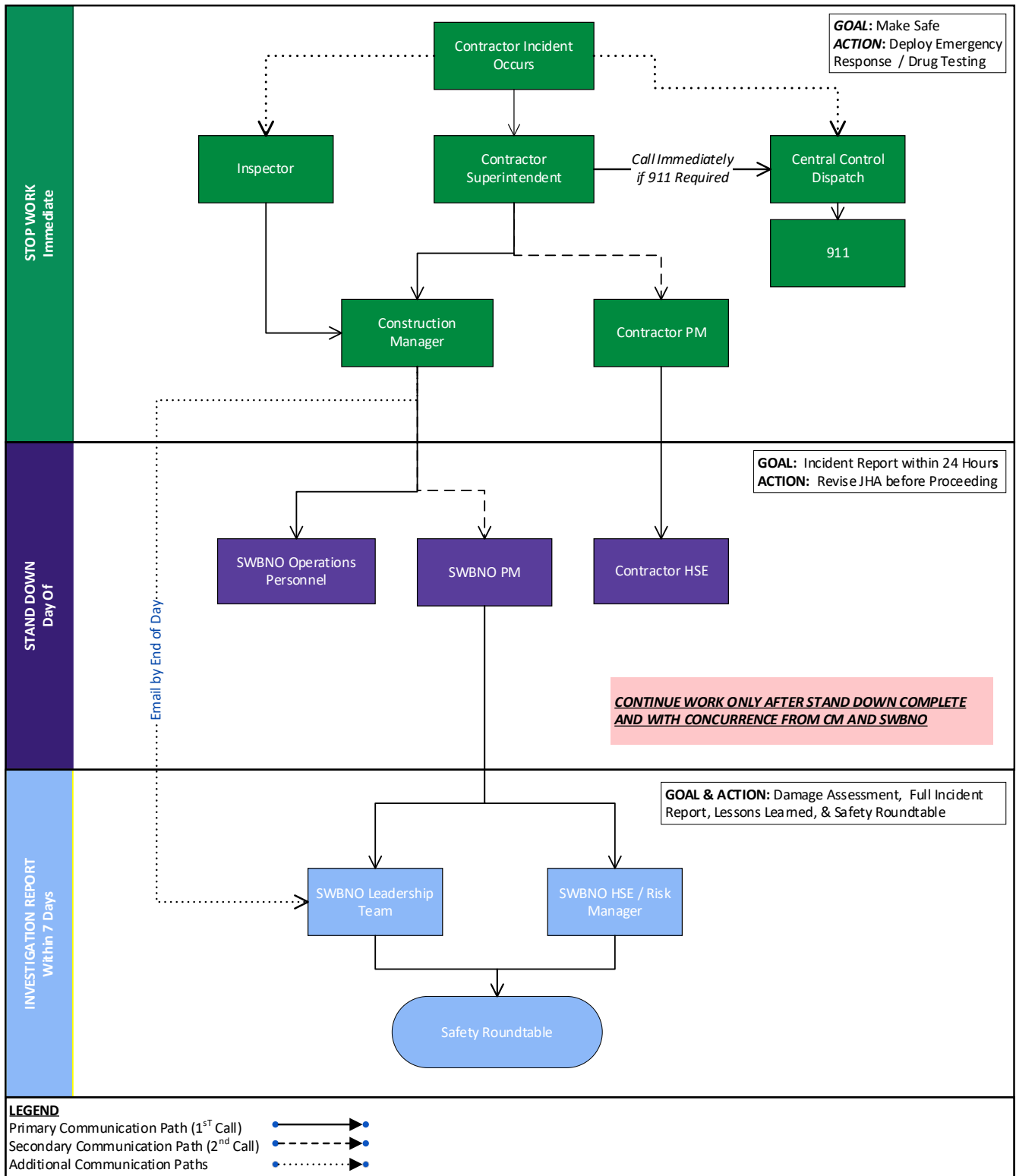
### **Phase 2 Stand Down (As Soon as Practical)**

- Contractor and Owner's CM to immediately begin incident investigation and reporting. Log and record incident in Contract Document Management System (DMS).
- Owner's CM to provide verbal notification to the SWBNO PM who makes immediate notifications throughout SWBNO.
- Any damaged plant equipment shall remain at the site until SWBNO has had the opportunity to view and approves transport offsite.
- Owner's CM to prepare an email summarizing the incident with distribution to the SWBNO PM and the SWBNO Leadership Team no later than the end of the day on which the incident occurred. Include details and photos as appropriate.
- ONLY proceed with Work once the Stand Down has been completed and a collective all clear is provided by Contractor/ Subcontractors, the Owner's CM, and SWBNO personnel.

### **Phase 3 – Investigation and Reporting**

- **Within 24 Hours** – Contractor shall prepare *Initial Incident Report* including preliminary damage assessment and submit by email with upload to DMS. Contractor shall utilize form provided as Exhibit 3 or alternate form approved by the SWBNO. Contractor and Construction Inspector shall log and record safety incidents daily. Owner's CM to review and distribute to the SWBNO PM and the SWBNO Leadership Team.
- **Within 7 Calendar Days** – Contractor shall prepare *Final Incident, Damage Assessment, and Remedial Actions Report* and submit via email with upload to DMS. Documentation is to be discussed in a roundtable meeting to include Contractor (Subs as appropriate), Owner's CM, and individuals designated by SWBNO. Lessons Learned disseminated shall be disseminated by the Owner's CM to all within one week of incident. Serious incidents may require longer investigation.

### Exhibit 1 – Incident Response and Reporting Flowchart



**Exhibit 2 – Contact List for Incident Reporting (to be populated and made part of Contractor’s Safety Program)**

<b>Entity</b>	<b>Primary Contact</b>	<b>Secondary Contact</b>	<b>Individual with Primary Responsibility for Immediate Contact</b>
<b>Contractor Superintendent</b>			<b>Operator, workers</b>
<b>Central Control (if required)</b>			<b>Contractor Superintendent</b>
<b>Contractor Project Manager</b>			<b>Contractor Superintendent</b>
<b>Owner’s Construction Manager</b>			<b>Contractor Superintendent</b>
<b>Construction Inspector</b>			<b>Operator, worker and/or Construction Superintendents</b>
<b>SWBNO Operations</b>			<b>Owner’s Construction Manager and/or Superintendent</b>
<b>SWBNO Project Manager</b>			<b>Owner’s Construction Manager</b>
<b>SWBNO Leadership Team</b>			<b>Owner’s Construction Manager</b>
<b>SWBNO Risk Management</b>			<b>SWBNO PM</b>
<b>Other _____</b>			<b>_____</b>

**Exhibit 3 – Initial Incident Reporting Template**

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# Initial Incident Notification Template

<b>Incident Title</b>			
<b>Incident Date</b>		<b>Incident Time</b>	<input type="checkbox"/> am <input type="checkbox"/> pm
<b>Contract Number</b>		<b>Contract Name</b>	
<b>Prime Contractor</b>		<b>Superintendent</b>	
<b>Subcontractor</b>		<b>Subcontractor Contact</b>	

## Incident Details *(A comprehensive incident report with additional details should be submitted within 7 days)*

### Incident Impacts *(Check all that apply)*

Injury  Near Miss  Property Damage  Equipment Damage  Environmental

### Where did the incident occur?

Was anyone injured? YES  NO

*(If YES, provide name of employee, description of injury, medical attention provided and by whom, and whether 911 was dispatched)*

Was any Board equipment or infrastructure damaged? YES  NO  *(If YES, provide details below including what was damaged, the extent of damage, assessment of impact to ongoing operations, and estimated repair requirements.)*

Describe any other impacts or damages that occurred as a result of the incident. (e.g., environmental, 3<sup>rd</sup> party)

List all personnel and associated role involved with incident. *(Attach witness statements from each individual involved)*

## Incident Description

What work was being performed at the time of the incident?

Describe what happened in sequence? *(Attach additional pages as necessary.)*

Based on preliminary assessment, what was the cause of the incident?



**Photos / Diagrams of Incident (Attach additional pages as necessary.)**

--	--

**Witness Statements**

--

**Stop Work and Standby Down Actions**

What immediate actions were taken? (e.g, emergency response or notifications, securing scene, making the area safe etc.)

--

Who was contacted to inform that the incident occurred?

--

Describe how work proceeded following the incident? Was a "Stand Down" conducted? Were any modifications to the JHA or perm its required?

--

Describe further investigations that are in progress and timeline for providing (detailed incident reports, damage assessments, etc.)?

--

**Contact Details**

<b>Form Prepared By</b>		<b>Signature</b>	
<b>Email</b>		<b>Phone</b>	

**Additional Information**

## ATTACHMENT 3

### Sewerage and Water Board of New Orleans Electrical Safety Clearance Procedure

#### Definitions:

**Operator:** The Board employee who is on-site and in responsible charge of the operation of the plant, station, or other facility.

**Out of Service:** The electrical/mechanical disconnection of equipment which is to remain inoperable.

**Power Dispatcher:** The shift employee on duty at Central Control at the time safety clearance occurs.

**Signee:** The person who actually tags-out equipment for safety clearance.

**Supervisor/Foreman:** The Board employee who is the supervisor/foreman in responsible charge of the repair/maintenance of one or more work locations which requires safety clearance. This person may not necessarily be "on-site" at any particular location.

**Tag-out:** The physical tagging of equipment by an operator for the purpose of disabling equipment.

**Lock-out:** The physical locking of equipment by an operator for the purpose of disabling equipment.

#### General Provisions

- 1) All equipment repair/maintenance work which is scheduled and requires safety clearance should be presented to Central Control at the beginning of each work day by the supervisor/foreman/electrical engineer in charge of the repair/maintenance. Twenty four (24) hour advance notice of scheduled work for major outages is desirable; however, it is understood that due to the nature of the services provided by the Board this preferred notice may not be possible for every safety clearance.
- 2) In cases where two (2) or more crafts are working on, or require safety clearance on the same equipment, the supervisor/foreman/electrical engineer for each craft must follow the appropriate safety clearance procedure and the equipment must be tagged out for each craft's signee. No equipment can be tested and/or restored to service until all tags have been removed in accordance with the tag removal procedure.

- 3) When an operator requests service for equipment at an unmanned facility, i.e. an unmanned sewer station or unmanned underpass station, from either Electrical Maintenance or Mechanical Maintenance, the appropriate maintenance department shall request the responsible operator to tag-out the equipment. When the appropriate maintenance department, in the course of servicing this equipment, requires restoration of power, the appropriate maintenance department shall contact the responsible operator directly (if operator is present) or by radio or telephone (if operator is absent) and request that the responsible operator grant his permission. If the power is to be restored for only a short duration, the appropriate maintenance department shall thereafter contact the operator for permission to either remove power or restore power, as often as needed. The operator shall log each request. If the request to restore power is for a short duration only, and the operator does not received contact from the appropriate maintenance personnel to remove power again, the operator shall make every attempt to contact the appropriate maintenance personnel in order to ensure that no accident has occurred.
- 4) If equipment must remain "Out of Service" upon completion of the on-site work, the signee must request their tag be replaced with an "Out of Service" tag in the name of their department: e.g. "Out of Service - Electrical Maintenance", in addition it must be physically locked-out by that department. However the "Out of Service" tag does not relinquish the responsibility of following the safety clearance procedure each day that piece of equipment is worked on.
- 5) Any equipment restored to service after being tagged "Out of Service" must be tested through operational test procedures. The signee must remain, when possible, on-site until testing is complete.
- 6) Any individual involved in these procedures may halt the procedure at any time if it is felt the safety of the personnel and/or equipment warrants said stoppage, or if conditions within the system change that may require postponement of the work.
- 7) In the event the responsible person, signee, leaves the job site without releasing the cleared equipment and is unreachable to release their tag-out the following procedure must be enacted before the signees name, tag-out, can be removed from the cleared equipment.
  - 1) Cause must be established by the senior power dispatcher giving reason to remove the tag-out.

- 2) Senior power dispatcher must receive orders from the Chief of Operations or higher, in his absence, to remove said tag-out.
- 3) Concurrence given by a senior representative of the following:
  - a) Department or company to which the signee works for.
  - b) Senior representative of the plant, station, facility in which the tag-out occurs.
  - c) If job site is in the field then, inspection by Electrical Engineering assuring work has halted for the day.

Once all areas have been satisfied then the senior power dispatcher may have the signees tag-out removed.

**NOTE: The above and following procedures may be deviated from above at the discretion of the power dispatcher in cases of emergency.**

**Safety Clearance Procedure  
25 Hertz System  
"Non-Sewerage and Water Board Personnel"**

- 1) The Company or responsible person representing that company shall first contact Electrical Engineering in regards to their outage request. Electrical Engineering will dispatch personnel to the job site and identify all equipment within close proximity to the work which should be cleared for safety.

**NOTE:** After normal working hours clearance request will be routed through Central Control who will notify the proper personnel in Electrical Engineering. It will be the responsibility of Electrical Engineering to identify said feeders.

- 2) Electrical Engineering will then contact the power dispatcher informing them of; the company, the person supervising the work, the work to be performed, and supplies the power dispatcher with a clearance list.
- 3) Electrical Engineering will then direct the company's signee to personally appear at any Board facility involved in the clearance prior to the request. Upon arrival at a Board facility the signee will contact the power dispatcher making their clearance request.
- 4) The power dispatcher reviews their one line schematics for any additional equipment they feel is required for safety.
- 5) If the request involved equipment within a station or facility the power dispatcher then notifies the operator of the work to be performed and supplies the operator with a list of the clearance request.
- 6) The operator makes a visual inspection of the work site and adds to the clearance list any additional equipment which they note as being involved in or in close proximity to the work site. A finalized clearance list is then agreed upon by all parties involved.
- 7) The power dispatcher, with assistance from other operating personnel as required and through normal operating procedures, will disconnect from all power sources all equipment on the finalized list.
- 8) After the completion of step seven (7), with the company's signee at a Board facility, the company's signee will be notified of the disconnection of the equipment by the power dispatcher. The company's signee will request the operator at each location to place a tag-out with the company name/signee's name on each piece of equipment on the clearance list.

- 9) After receiving a tag-out report from the operators, the power dispatcher will then verify the tag-out reports against their finalized clearance list. If satisfactory, the power dispatcher will verify with the company's signee what was tagged-out. The company's signee will then be allowed to begin work.
- 10) At this point prior to the beginning of any actual work it is the responsibility of the person or persons performing the work to check the equipment with a voltage tester. If all voltage testing is satisfactory, "no voltage", work may begin.

**NOTE:** Due to the nature of some work it may be necessary that voltage be present.

- 11) Upon completion of the on-site work, the company's signee must report to a Board facility, involved in the clearance. At this point the company's signee will request the operator at each location to remove their tag-out with the company name/signee name off each piece of equipment. The operator and power dispatcher may restore the equipment to its connected position and test same following standard operating procedures.
- 12) If the equipment is to remain out of service, the company's signee must request their tag be removed and an appropriate "Out of Service" tag in the name of their company be placed on the equipment. The equipment will also be physically locked-out by the operator at each location, which would prevent the reconnection and testing process.
- 13) When "Out of Service" equipment is to be returned back into service, only an employee of the company which originally placed the "Out of Service" tag may request it be removed, returning said equipment into service.

**Safety Clearance Procedure  
60 Hertz System  
"Non Sewerage and Water Board Personnel"**

- 1) The company or responsible person representing that company shall first contact Electrical Engineering in regards to their outage request. Electrical Engineering will dispatch personnel to the job site and identify all equipment within close proximity to the work which should be cleared for safety.
- 2) Electrical Engineering will then contact the power dispatcher, if the work to be performed is outside of a station. The operator, if the work to be performed is inside the station. They will inform them of; the company, the person supervising the work, the work to be performed, and supplies the power dispatcher or operator with a clearance list.
- 3) The Electrical Engineering will then direct the company's signee to personally appear at any Board facility involved in the clearance prior to the request. Upon arrival at a Board facility the signee will conduct their business with the operator or power dispatcher based on the procedures listed below.
- 4) The power dispatcher reviews their one line schematics or the operator make a visual inspection of the work site and adds to the clearance list any additional equipment which they note as being involved in or in close proximity to the work site. A finalized clearance list is then agreed upon by all parties involved.
- 5) **If handled through the power dispatcher:**  
The power dispatcher, with assistance from other operating personnel as required and through normal operating procedures, will disconnect from all power sources all equipment on the finalized clearance list.

**If handled through the operator:**

The operator will contact the power dispatcher informing them of the work to be performed along with a clearance list request. The power dispatcher reviews their one line schematics for any additional equipment they feel is required for safety. A finalized clearance list is then agreed upon by all parties involved. The operator will then through normal operating procedures disconnect from all power sources all equipment on the finalized clearance list.



6) After the completion of step five (5), with the company's signee at a Board facility, the company's signee will be notified of the disconnection of equipment by the operator or power dispatcher. The company's signee will then request the operator at each location to place a tag-out with the company's name/signee name on each piece of equipment on the clearance list.

**7) If handled through the operator:**

The operator will then contact the power dispatcher providing them with a tag-out report for logging purposes.

8) At this point prior to the beginning of any actual work it is the responsibility of the person or persons performing the work to check the equipment with a voltage tester. If all voltage testing is satisfactory, "no voltage", work may begin.

**NOTE:** Due to the nature of some work it may be necessary that voltage be present.

9) Upon completion of the on-site work, the company's signee must report to a Board facility involved in the clearance. At this point the company's signee will request the operator at each location to remove their tag-out with the company's name/signee name off each piece of equipment. The operator and/or power dispatcher may restore the equipment to its connected position and test same following standard operating procedures.

10) If the equipment is to remain out of service the company's signee must request their tag be removed and an appropriate "Out of Service" tag in the name of their company be placed on the equipment. The equipment will also be physically locked-out by the operator at each location, which would prevent the reconnecting and testing process.

11) When "Out of Service" equipment is to be returned back into service, only an employee of the company which originally placed the "Out of Service" tag may request it be removed, returning said equipment into service.

## ATTACHMENT 4 - SEWERAGE and WATER BOARD of NEW ORLEANS

### Storm Water Pollution Prevention Plan (SWPPP) And Storm Water Best Management Practices (BMP) Requirements

#### GENERAL

1. The contractor shall prepare and maintain a Storm Water Pollution Prevention Plan (SWPPP), which describes in specific details the Contractor's program to prevent contamination of the storm water collection system for this project. A suggested SWPPP Templates and Sample Inspection Report, as well as other valuable information can be found at EPA's website <http://cfpub.epa.gov/npdes/stormwater/swppp.cfm>.
2. Contractor shall implement, maintain, inspect and remove all erosion and sediment controls identified in the SWPPP. The program shall address both common construction activities and extraordinary events.
3. Contractor shall include Water Pollution Control Drawings (WPCD) in the SWPPP to illustrate the locations, applications and deployment of Best Management Practices (BMPs) identified in the SWPPP. The WPCDs shall be included as an attachment to the SWPPP.
4. Best Management Practices (BMPs): A Best Management Practice is a technique, process, activity, or structure used to reduce the pollutant content of a storm water or non-storm water discharge. BMPs may include simple, non-structural methods such as good housekeeping, staff training, and preventive maintenance. Additionally, BMPs may include structural modifications such as the installation of berms, canopies or treatment control
5. The Contractor shall comply with laws, rules, and regulations of the State of Louisiana and agencies of the United States Government prohibiting the pollution of lakes, wetlands, streams, or river waters from the dumping of contaminants, refuse, rubbish or debris.
6. The contractor shall submit six (6) copies of the SWPPP, a minimum of 10 working days prior to beginning construction, to the Engineer. **Construction shall not begin until the SWPPP is approved.** Contractor shall update the SWPPP as necessary during the work to prevent contamination of the storm water collection system.
7. Before start of work, Contractor shall train all employees and subcontractors on the approved SWPPP and related WPCD and provide the Sewerage and Water Board with written documentation of said training.
8. Suggested BMPs can be obtained from Ella Barbe, LA DEQ Small Business Assistance Program, 201 Evans Rd. Bldg. 4, Suite 420 Harahan LA. Phone 504-736-7739, e-mail: [ella.barbe@la.gov](mailto:ella.barbe@la.gov)

## CONSTRUCTION

The contractor shall keep a copy of the SWPPP on the job site. The contractor shall provide continuously at the jobsite all the tools, equipment, and materials necessary to implement the SWPPP at all times from project initiation through completion, including any punchlist or warranty work on the project. At a minimum the following requirements shall be met as applicable, to the maximum extent practicable, at construction sites:

1. **Storm Drain System Protection:** At the first order of work, the Contractor shall protect the existing storm drain system from entrance of construction debris and pollutants. Such protection shall include implementing the BMPs as outlined in the SWPPP. Protection shall prohibit the discharge of untreated runoff from temporary or permanent street maintenance/landscape maintenance material and waste storage areas from entering the storm drain system. Sediment that is generated on the project site shall be retained using structural drainage controls. In addition, the protection system shall have a minimum of three features: 1) a particulate filter of geosynthetic material securely fastened in place such that it cannot be bypassed without significant physical damage; 2) a prefilter for the particulate filter; and 3) on-hand materials to close off the inlet or opening in the case of a significant pollution spill. Contractor shall monitor and maintain all storm drain inlet protection devices during rain events to prevent flooding.
2. **Material Management & Storage:** No construction-related materials, wastes, spills or residues shall be discharged from the project site to streets, drainage facilities or adjacent properties by wind or runoff. All materials and/or equipment storage areas where liquid construction materials are placed shall be protected by a physical barrier capable of containing the entire volume of stored liquid materials. During active construction activities, portions of the barrier may be removed for access. However, the barrier materials must be readily accessible for replacement by onsite construction personnel. The barrier must be in place at all times during the absence of Contractor personnel at the storage site. Building materials shall be placed on pallets and covered in event of rain. Do not store materials in the street or gutter area.
3. **Equipment & Vehicle Maintenance:** Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained at the project site and shall not be allowed to discharge from the project site to streets, drainage facilities or adjacent properties by wind or runoff. The Contractor shall inspect vehicles and equipment on each day of use. Leaks shall be repaired off-site if possible. If necessary to repair on site, the runoff must be contained or the problem vehicle or equipment shall be removed from the project site until repaired. If necessary, drip pans shall be placed under the vehicles or equipment while not in use to catch and/or contain drips and leaks.
4. **BMP Inspection:** The contractor shall inspect all pollution control BMPs regularly. The Contractor shall also repair/replace any damaged or clogged element on a daily basis. During periods of precipitation where any runoff occurs, the system shall be checked twice a day, seven days a week, whether or not any work has been performed. The daily checks shall be between 6 a.m. and 9 a.m., and 4 p.m. to 8 p.m. The contractor shall keep a monitoring inspection log of each inspection.
5. **Spill Prevention & Cleanup Plan:** Contractor shall have a spill prevention plan and spill cleanup materials readily available and addressed in the SWPPP. Spills shall be cleaned

up immediately using dry methods if possible. Spill cleanup material shall be properly disposed off site. Contractor shall keep a record of any spills in the inspection log. In addition, at the end of the project, the Contractor must certify that all contaminated materials have been properly disposed in accordance with the SWPPP.

6. **Asphalt & Concrete Activities:** Asphalt and concrete activities shall be scheduled for dry weather. Contractor shall prohibit saw cutting during a storm event of 0.25 inches or greater. Store bags of cement away from gutters and storm drains, sealed and covered, protected from rainfall runoff and wind. Place tarp under cement mixer before operating to catch spills. Never dispose of cement washout or concrete dust onto driveways, streets, gutters or storm drains.
7. **Sidewalk Washing:** The following methods should be utilized to prevent discharge of sidewalk cleaning wastewater into the storm drain system:
  - a. Sweep and pick up all areas to be cleaned before using water.
  - b. Manually scrape gum from sidewalks and other surfaces.
  - c. Must use high pressure and low volume of water with no additives and at an average usage of 0.006 gallons per square foot of surface area to be rinsed.
  - d. Use a wet/dry vacuum to collect wash water for disposal. Large volumes of wash water may require the use of a small sump pump to remove wash water from the job site.
  - e. One or more of the following methods are recommended to prevent pollutants from entering the storm drain system:
    - Sandbags can be used to create a barrier around storm drains. \*
    - Rubber mats or plugs can be used to seal drain openings. \*
    - Temporary berms or containment pads help keep water on site. \*
    - Use berms of sandbags to direct wash water to landscaping. \*
    - Use large squeegees to accumulate sheet flow for collection.\* Remember to remove plugs, berms, and sandbags or you may be liable for possible flooding.
  - f. Wash water that may contain hazardous waste such as oil-saturated absorbents, water with lead or other heavy metals from oxidized paint, and solvent cleaners requires special treatment and must be disposed of through a hazardous waste facility.
8. **Employee BMP Training:** Contractor shall train employees and subcontractors on BMP implementation, general good housekeeping, and proper spill containment and cleanup. Before start of work, Contractor shall provide the Board with written documentation of training and keep all documentation in the SWPCP.
9. **Inspection:** Contractor shall inspect and repair or replace, as needed, all job site BMPs a minimum of:
  - Biweekly
  - Before, during and after a major rain event.Contractor shall document the inspections in the SWPPP.
10. **Dewatering:** Avoid dewatering discharges where possible by using the water for dust control, infiltration, etc..

**ATTACHMENT 5  
WAGE RATES**

The contractor shall abide by the Davis-Bacon Act Wage Decision. The Wage Decisions applicable to SWB Construction is Heavy Industrial (LA20240008 - 10/24/2024 - Mod 7).

*Drinking Water Revolving Loan Fund Program • Guidance for Including the*  
**REQUIRED CLAUSES FOR CONTRACT DOCUMENTS**

**LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH**

The following three clauses must be included verbatim in the bid/contract documents to satisfy the federal cross cutting laws. The complete verbatim statements may be found below.

- I. Equal Opportunity Clause: 41 CFR PART 60-1.4
- II. Historical Preservation Clause: 36 CFR PART 800
- III. Endangered Species Clause: Endangered Species Act Of 1973, As Amended

**I. EQUAL OPPORTUNITY CLAUSE: 41 CFR PART 60-1.4**

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked

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**REQUIRED CLAUSES FOR CONTRACT DOCUMENTS**

**LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH**

as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (8) The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**II. HISTORICAL PRESERVATION CLAUSE: 36 CFR PART 800.**

The contractor agrees that, should evidence of historical or archeological sites be discovered during construction, all work in the area will cease immediately and the owner will be informed of the discovery. The owner will, in turn, will promptly notify the Louisiana Department of Health - Office of Public Health - Drinking Water Revolving Loan Fund (LDH-OPH-DWRLF) Program.

After consulting with the appropriate State and Federal agencies, the DWRLF Program will advise the owner of any protective measures that may be required.

**III. ENDANGERED SPECIES CLAUSE: ENDANGERED SPECIES ACT OF 1973, AS AMENDED**

The contractor agrees that, should plants or animals belonging to either endangered or threatened species be discovered in the area of construction or adjacent areas, all work in that area will cease immediately, and the owner will be informed of the discovery. The owner will, in turn, will promptly notify the Louisiana Department of Health - Office of Public Health - Drinking Water Revolving Loan Fund (LDH-OPH-DWRLF) Program.

After consulting with the appropriate State and Federal agencies, the DWRLF Program will advise the owner of any protective measures that may be required.

# FORM RF211 – EQUAL OPPORTUNITY EMPLOYMENT

LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH

## PROSPECTIVE PRIME CONTRACTOR'S (BIDDER'S) STATEMENT ABOUT EQUAL OPPORTUNITY CLAUSE

- ( ) I have participated in previous contract(s) or subcontract(s) subject to the equal opportunity clause under Executive Orders 11246 and 11375 or preceding Executive Orders 10925 and 11114. I have filed all reports due under the requirements contained in 41 CFR Part 60-1.4.
- ( ) I have not participated in previous contract(s) subject to the equal opportunity clause under Executive Orders 11246 and 11375 or preceding Executive Orders 10925 and 11114.

I will obtain a similar statement from any proposed subcontractor(s), when appropriate.

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(PROJECT or WATER SYSTEM NAME)

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(Signature and Title of Prospective Prime or Sub Contractor's Representative)

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(Printed or typed Name and Title of Prospective Prime or Sub Contractor's Representative)

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(Name and address of Prospective Prime or Sub Contractor)



# FORM RF212 – NONSEGREGATED FACILITIES

LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH

## PROSPECTIVE PRIME CONTRACTOR'S (BIDDER'S) CERTIFICATION OF NONSEGREGATED FACILITIES

I hereby certify that I do not and will not maintain any facilities provided for my employees in a segregated manner, or permit my employees to perform their services at any locations under my control where segregated facilities are maintained; and that I will obtain a similar certification prior to the award of any federally assisted subcontract exceeding \$10,000 which is not exempt from the equal opportunity clause.

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(PROJECT or WATER SYSTEM NAME)

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(Signature and Title of Prospective Prime or Sub Contractor's Representative)

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(Printed or typed Name and Title of Prospective Prime or Sub Contractor's Representative)

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(Name and address of Prospective Prime or Sub Contractor)

Drinking Water Revolving Loan Fund Program • Guidance for Submitting the  
**DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

**GOOD FAITH EFFORT REQUIREMENTS**

**LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH**

To ensure that contracts provide employment and growth opportunities for disadvantaged businesses, the Federal Government requires that all procurement made with Federal funds follow six (6) “Good Faith Effort” steps to utilize Disadvantaged Business Enterprises (DBEs), which includes minority (MBE), women (WBE), small (SBE), and small businesses in rural areas (SBRA). For that reason, Bidders/Prime Contractors/Subcontractors are required to submit proof demonstrating that good faith efforts have been made to maximize participation with DBE subcontractors prior to award and during the life of the contract. The good faith efforts requirements under the Louisiana Department of Health (LDH) - Office of Public Health (OPH) - Drinking Water Revolving Loan Fund (DWRLF) (40 CFR 33.301) are contractual obligations that must be fulfilled.

**THE SIX (6) GOOD FAITH EFFORTS**

1. Inclusion of DBEs on solicitation lists,
2. Assure DBEs are solicited once they are identified,
3. Where feasible, divide total requirements into smaller tasks to permit maximum DBE participation,
4. Where feasible, establish delivery schedules that will encourage DBE participation,
5. Encourage use of the services of the U.S. Department of Commerce’s Minority Business Development Agency (MBDA) and the U.S. Small Business Administration to identify DBEs,
6. Require that each party to a subgrant, subagreement, or contract award take the affirmative steps outlined here.

Performing the above six efforts represents “good faith” efforts to attract and utilize DBEs, primarily through race/gender neutral outreach, recruitment and other activities. The objective is to expand the pool of bidders to include these types of businesses, not to use race or ethnicity in the actual decision - in other words, to level the playing field for these types of businesses. All efforts must be documented.

**GOALS**

In order to track and measure the DBE participation in Federally Funded Programs, as is the DWRLF, goals have been designated that the programs are expected to meet. Currently, the DWRLF is required to track the participation of all DBEs. However, goals have been set and reporting is required only for MBE and WBE participation. The goals have been divided into four categories as follows:

<b>CURRENT GOALS*</b>	<b>SUPPLIES</b>	<b>EQUIPMENT</b>	<b>SERVICES</b>	<b>CONSTRUCTION</b>
<b>MBE</b>	5.0 %	4.0 %	25.0 %	23.0 %
<b>WBE</b>	5.0 %	5.0 %	19.0 %	14.0 %

*\* Current Goals are based on the FFY 2017 goals. These goals will be in effect for at least the next 3 federal fiscal years until further notice. They are subject to change due to any significant changes to the data supporting the fair share objectives.*

## DOCUMENTATION OF GOOD FAITH EFFORTS

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**All Bidders, Prime Contractors, and Suppliers** are required to document their efforts in following the six (6) Good Faith Efforts, *regardless of whether or not a DBE firm is used*. The below noted **7 DBE Forms** *must* be used to document the six (6) Good Faith Efforts. *Additional documentation* of solicitation efforts in the form of copies of emails, faxes, letters, posts, etc. showing DBE solicitations must also be provided.

1. **DBE FORM 1** - DBE COMPLIANCE AGREEMENT
2. **DBE FORM 2** - DBE CONTRACTOR DATA  
This form identifies the Prime Contractor and all Subcontractors to be USED on this contract. Also copies of all contracts and/or purchase agreements with subcontractors must be attached.
3. **DBE FORM 3** - DBE SUBCONTRACTOR CONTACT LOG  
This form logs all attempts made to contact DBEs. Copies of emails, posts, letters, and faxes sent to DBEs for solicitation purposes must be attached.
4. **DBE FORM 4** - DBE SUBCONTRACTOR BIDS LIST  
This form identifies all DBE proposals that were received by the contractor and whether the proposals were accepted or rejected.
5. **DBE FORM 5** - DBE LETTER OF INTENT  
This form must be used in lieu of a formal contract agreement between the Prime Contractor and any DBE Subcontractors or Sub-subcontractors.
6. **DBE FORM 6** - DBE SUBCONTRACTOR PARTICIPATION FORM  
**This form (formerly 6100-2) must be provided by Prime Contractors to all DBE subcontractors**, who have the option to complete and submit it back to this office to report any issues to EPA's Region 6 Small and Disadvantaged Business Coordinator.
7. **DBE FORM 7** - DBE SUBCONTRACTOR PERFORMANCE FORM  
**This form (formerly 6100-3) must be provided by Prime Contractors to all DBE subcontractors**, who have the option to complete and submit it back to this office to report any issues to EPA's Region 6 Small and Disadvantaged Business Coordinator.

Failure to properly complete and submit the appropriate DBE Forms shall make the successful Bidder/Prime Contractor ineligible to be authorized by the DWRLF to receive construction payments. The DWRLF Project Engineer shall have the right to seek clarification or additional information to assure good faith effort compliance. All Bidders/Prime Contractors/Suppliers shall keep all such records as are necessary for EPA to determine compliance with the DBE contract obligations. **The required forms listed above document only the minimum information required.** The minimum information is designed to illustrate the contractor's demonstrated efforts made to negotiate in good faith with interested DBEs for specific items of work. The contractor's records shall include the following:

1. Names, addresses and telephone numbers of all DBEs contacted and DBEs to be used.
2. The dates of initial contact and whether initial solicitations of interest were followed-up personally, by mail, or by phone to determine the DBEs interest.
3. A description of the information provided to DBEs regarding the nature of the work, the plans and specifications and estimated quantities for portions of the work to be performed.
4. A statement of why additional agreements with DBEs were not reached.
5. Documentation of each rejected DBE and the reasons for rejection.
6. All other efforts to obtain services of DBEs.

For those DBEs used for the project, the contractor's records shall include, in addition to the information listed above, the following:

1. Copies of subcontracts.
2. The type of work being performed.
3. Documentation such as canceled checks and paid invoices verifying payment for work, services, and procurement.
4. Documentation of correspondence, verbal contacts, telephone calls.

For additional ways to demonstrate good faith efforts, please see the "ADDITIONAL EFFORTS" section below.

All Bidders/Prime Contractors/Suppliers shall submit information regarding DBEs in such form, manner and content as prescribed by DWRLF. DWRLF reserves the right to investigate, monitor and/or review actions, statements and documents submitted by any Bidder, Prime Contractor, Subcontractor, or Supplier.

## CONTACTING DBEs

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All Bidders/Prime Contractors/Suppliers are required to make good faith efforts to contract with DBEs for each category of work identified in the GOALS section above. These efforts must be made and documented, and the appropriate forms must be submitted to the DWRLF in order to qualify and be authorized to receive construction payments.

The Bidder/Prime Contractor/Supplier shall provide notice to a reasonable number of DBEs to see if any are interested in participation as a subcontractor, supplier, manufacturer, or consultant for specific items of work. All DBEs utilized must provide a DBE Certification (of any kind) in order to qualify towards the DBE goals. If a DBE is not certified but intended to be used, please provide them with the "CERTIFICATION" Section located at the end of this document. Once certified, please provide the Certifications to DWRLF.

DBE companies and information may be obtained from the agencies listed in the attached "Attachment A – Certification Sources". *The DWRLF strongly encourages the utilization of these agencies.*

**WHEN TO CONTACT DBEs:** Depending upon bid/project conditions, notification should be provided with sufficient time to allow the DBEs to participate effectively.

**HOW TO CONTACT DBEs:** DBEs can be found online and may be contacted by email, letter or fax to advise of potential subcontracting opportunities. The email, letter, or fax must include project information about plans, specifications, timing and other requirements, sufficient to permit the DBE firm to have an equal opportunity to compete for work as a subcontractor or provide project supplies/services. A follow-up email/call must be made to determine if a proposal will be submitted or if additional information is required by the DBE. A follow-up email/call is not necessary if a response is made after the first contact. *Note that blanket advertising in trade journals, newspapers or in other media is not alone considered sufficient effort.*

**IMPORTANT NOTE:** It is the decision of the consultant engineer and/or the water system as to whether the above listed documentation will be a matter of bidder responsibility or a matter of bid responsiveness. Generally, the documentation is a matter of bidder responsibility and it will be treated as such unless it clearly and unequivocally states in the bid documents that failure to meet the DBE requirements will cause the bid to be rejected as non-responsive. In deciding to make these requirements matters of responsiveness, extreme care must be exercised in drafting the invitations for bid and all bid solicitation documents. If there is any ambiguity in these documents concerning whether a bid failing to comply with the requirements will be automatically rejected as non-responsive, then the requirement will be considered to be a matter of responsibility which can be cured by the bidder after the bid opening. Consequently, where there is such ambiguity in the bid solicitation documents, a nonconforming bid must not be rejected as non-responsive.

### **ADDITION OR REPLACEMENT OF SUBCONTRACTORS DURING THE PROJECT:**

If any subcontractor is added or replaced after the contract award or at any time during the life of the project, the Prime Contractor shall again make good faith efforts to contract with a DBE for the work to be performed by that subcontractor. Documentation of these efforts is required as stated above and the proper forms must be submitted to the DWRLF Project Engineer for approval.

## ADDITIONAL EFFORTS

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Good faith efforts include personal contacts, follow-ups and earnest negotiations with DBEs. The DWRLF will consider, at a minimum, the required documentation above as relevant efforts. However, the contractor shall keep all such records as are necessary for the DWRLF to determine compliance with the DBE contract obligations. Therefore, the following list provides additional efforts to assist in carrying out the six Good Faith Effort outreach and recruitment activities. This listing is not exclusive or exhaustive and other factors and types of efforts may be relevant.

- Perform an analysis to identify portions of work that can be divided and afford maximum participation by qualified subcontractors and supplier DBEs.
- Scrutinize the elements of the total project to develop economically feasible units of work that are within the bonding range of DBEs.
- Consider lead times and develop realistic delivery schedules, which may provide for greater DBE participation.
- Provide DBE trade organizations with summaries of solicitations.

- Effectively utilize the services of available community organizations; contractor's groups; local, state and federal business assistance offices such as the Small Business Administration, Minority Business Development Agency, US EPA, Office of Small and Disadvantaged Business Utilization (OSDBU), the Department of Transportation; and other organizations to assist in identifying DBEs for potential work opportunities on your projects.
- Maintain and update a listing of qualified DBEs that can be solicited for supplies, construction, equipment and/or services. Provide listings to all interested parties who request copies of the bidding or proposing documents.
- Advertise in general circulation, trade publications, State agency publications, DBE-focused media, etc., concerning contracting and subcontracting opportunities on your projects. Maintain a list of DBE-focused publications that may be utilized to solicit MBEs and WBEs.
- Conduct meetings, conferences and follow-ups with DBEs to inform these groups of opportunities to provide supplies, services, equipment, and construction or to walk the job-site.
- Conduct pre-bid, pre-solicitation and post-award conferences to ensure that consultants, suppliers, and builders solicit DBEs.
- Maintain copies of all bids and quotations received from DBE subcontractors and an explanation of why they were not used for company records.
- Assisting DBEs in obtaining bonding, insurance, or lines of credit required by the recipient or contractor.

## DBE CERTIFICATION

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**DBEs must be CERTIFIED!** See **Attachment A – Certification Sources** for a list of ways to get certified. The DWRLF will accept any Certified DBE that meets the following criteria:

- a. Certified by a Federal or a State/Local Governmental Agency, and
- b. Be an independent business concern, which is at least 51 percent owned and controlled by minority group member(s) for MBE(s) or women WBE(s) who are citizens of the United States.
  1. A minority group member is an individual who is a *Black American*, *Hispanic American* (with origins from Puerto Rico, Mexico, Cuba, South or Central America), *Native American* (American Indian, Eskimo, Aleut, native Hawaiian), or *Asian-Pacific American* (with origins from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust territories of the Pacific, Northern Marianas, Laos, Cambodia, Taiwan or the Indian subcontinent).
  2. The ownership must be real, substantial and continuing.
  3. The owner must have and exercise control over the business decisions.
  4. Must perform a useful business function according to custom and practice in the industry; or
- c. Be a Historically Black College or University (HBCU).
- d. In the case of Small Business Concerns (SBEs), any business entity, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria and size standards set forth in 13 CFR Part 121.
- e. In the case of Small Business in a Rural Area (SBRA), any business entity meeting the definition of a small business (e), and is located and conducts its principle operations in a geographic area (County or parish) listed in the Small Business Administration's Listing of Non-Metropolitan Counties by State.

Additional information may be required to prove ownership and control if there is reasonable cause to believe that a firm doing business is not a legitimate DBE. Such information may include, but not be limited to:

- The certificate described above,
- Names and addresses of legal owners including race, gender, percentage of ownership, percentage of control and the date each owner became an owner of the firm,
- Financial, banking and credit information,
- Whether the firm has ever been denied certification as an MBE/WBE by SBA, a State, or Federal agency and, if so, when and by whom, and
- Other information demonstrating ownership and control.

Drinking Water Revolving Loan Fund Program • Guidance for Submitting the  
**DISADVANTAGED BUSINESS ENTERPRISE (DBE)**  
**ATTACHMENT A - CERTIFICATION SOURCES**

**LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH**

The following is a **List of Federal, State and Local Agencies** that have a Disadvantaged Business Enterprise (DBE) program in place. These agencies will be able to assist in locating certified DBEs for this project in order to meet the DWRLF DBE requirements.

**State of Louisiana Unified Certification Program (UCP) – by LDOTD (includes some of the below LA agencies in a single search)**

<http://www8.dotd.louisiana.gov/UCP/UCPSearch.aspx>

Louisiana Department of Transportation & Development

Post Office Box 94245

Baton Rouge, Louisiana 70804-9245

Remy Graves

(225) 379-1762 (telephone)

[remy.graves@la.gov](mailto:remy.graves@la.gov)

[http://wwwsp.dotd.la.gov/Inside\\_LaDOTD/Divisions/Administration/Compliance/Pages/DBE\\_Admin\\_Unit.aspx](http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Administration/Compliance/Pages/DBE_Admin_Unit.aspx)

Women's Business Enterprise Council South

Blanca Robinson, President

(504) 830-0149

[www.wbecsouth.org/](http://www.wbecsouth.org/)

Sewerage and Water Board of New Orleans' Economically Disadvantaged Businesses Program (EDBP)

Alvin G. Porter

Compliance Supervisor, Economically Disadvantaged Business Program

625 St. Joseph St., Room 305

New Orleans, LA 70165

Cell: 504-439-0383

Fax: 504-585-2461

E-Mail: [APorter@swbno.org](mailto:APorter@swbno.org)

City of Shreveport Fair Share Program

Karen Barnes

(318) 673-5060

[Karen.barnes@ci.shreveport.la.us](mailto:Karen.barnes@ci.shreveport.la.us)

Southwest LA Partnership for Economic Development

Liz Deville

(337) 433-3632

[ldeville@allianceswla.org](mailto:ldeville@allianceswla.org)

New Orleans International Airport

Post Office Box 20007

New Orleans, Louisiana 70141

Philistine Ferrand

(504) 303-7611 (telephone)

(504) 303-7614 (fax)

[phillisti@flymsy.com](mailto:phillisti@flymsy.com)

<http://www.flymsy.com/dbe-program>

Orleans Levee District

6508 Spanish Fort Blvd.

DBEG 11/7/24

New Orleans, Louisiana 70124  
Joan M. Coats, DBE Liaison Officer  
(504) 286-8130 (telephone)  
(504) 286-8131 (fax)

Regional Transit Authority  
2817 Canal Street  
New Orleans, Louisiana 70119  
Janice Abadie, DBE Compliance Manager  
(504) 827-8308 (telephone)  
<http://www.norta.com/>  
[jabadie@norta.com](mailto:jabadie@norta.com)

Louisiana Economic Development  
P.O. Box 94185  
Baton Rouge, La 70804  
John W. Matthews, Jr.  
(225) 342-1181  
(225) 342-9390 Fax  
[John.Matthews@LA.GOV](mailto:John.Matthews@LA.GOV)

LA Department of Environmental Quality  
Clean Water SRF Program  
Jonathan McFarland, P.E.,  
Business and Community Outreach and Incentives  
DBE Coordinator Telephone: (225) 219-3956  
[jonathan.mcfarland@la.gov](mailto:jonathan.mcfarland@la.gov)

U.S. Department Of Commerce  
Minority Business Development Agency  
[www.mbda.gov](http://www.mbda.gov)

U.S. Environmental Protection Agency  
Suggested Resources for Identifying Small, Minority, and Women-Owned Businesses  
<http://www2.epa.gov/resources-small-businesses>

U.S. Small Business Administration  
<https://www.sba.gov/category/navigation-structure/starting-managing-business/starting-business/choose-register-your-busi>

Louisiana Minority Business Council (LAMBC)  
Phala Mire, President/MBOC Administrator  
(504) 299-2960  
[www.lambc.org/Certification.aspx](http://www.lambc.org/Certification.aspx)

# DBE COMPLIANCE AGREEMENT

Louisiana Department Of Health · Office Of Public Health

**By signing this document, Successful bidder hereby certifies and understands that:**

1. It has not discriminated against any DBE firms in awarding subcontracts for this project.
2. The good faith efforts requirements under the Drinking Water Revolving Loan Fund (40 CFR 35.3575.d) are contractual obligations that must be fulfilled whether or not listed on these forms.
3. Successful bidders must submit all required forms and attachments. Failure to provide any information may prevent authorizatoin to award contract by LDH.
4. Additional documentation to verify or clarify good faith efforts must be provided upon request.
5. Replacement of a subcontractor before contract award or during performance without: (a) obtaining the prior written consent of LDH, and (b) subsequent good faith efforts in selection of a replacement, is prohibited and a breach of contract.
6. In the absence of a formal contractual agreement between the prime contractor and DBE subcontractors, DBE Form 5 - the DBE Letter of Intent shall be submitted for each subcontractor.

**And, Executes this Compliance Agreement as:**

Loan Recipient: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

By: \_\_\_\_\_  
Signature of Authorized Owner or Representative Title Date

Print Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

By: \_\_\_\_\_  
Signature of Authorized Owner or Representative Title Date

Print Name: \_\_\_\_\_



# DBE CONTRACTOR DATA

Louisiana Department Of Health · Office Of Public Health

Loan Recipient Name<sup>1</sup>: \_\_\_\_\_ Loan/PWSID #<sup>2</sup>: \_\_\_\_\_  
 Brief Contract Description<sup>3</sup>: \_\_\_\_\_ LDH Contract #<sup>4</sup>: \_\_\_\_\_

	DBE Prime/Sub Contractor Name / Address Telephone / Fax Numbers <sup>5</sup>	Contract Amount (\$) <sup>6</sup>	Description and Category of Work <sup>7</sup>	Disadvantaged Business Enterprise (DBE) Status <sup>8</sup> (Check all that apply)	Federal Tax ID# <sup>9</sup>
1			Supplies Equipment Services Construction	Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)	
2			Supplies Equipment Services Construction	Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)	
3			Supplies Equipment Services Construction	Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)	
4			Supplies Equipment Services Construction	Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)	
5			Supplies Equipment Services Construction	Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)	

All written contract and/or purchase agreements with above contractors **MUST** be submitted with this form. If it is a purchase agreement only, or if there is no written agreement, then **DBE FORM 5** must be submitted.

Attach extra sheets as necessary for additional contractors and subcontractors.

\* Indicate if the subcontractor is going to hire other subcontractors. If so, an additional sheet listing them is required.

I hereby certify that the above information is true and correct and that I will notify LDH, in writing, of any changes that occur prior to completion of the work.

Loan Recipient: \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature of Authorized Representative)

Prime Contractor: \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature of Authorized Representative)

# INSTRUCTIONS FOR THE DBE CONTRACTOR DATA FORM

Louisiana Department Of Health · Office Of Public Health

This form **MUST** be submitted to LDH before the first payment request to the contractor will be processed.

All written contract and/or purchase agreements with above contractors **MUST** be submitted with this form. If it is a purchase agreement only, or if there is no written agreement, then DBE Form 5 must be submitted.

Attach extra sheets as necessary for additional contractors and subcontractors. \* Indicate if the subcontractor is going to hire other subcontractors. If so, an additional sheet listing them is required. Replacement, substitution or addition of DBE firms must be handled in conformance with the contract documents.

1. **LOAN RECIPIENT:** Indicate the name of the loan recipient as listed on the contractual documents.
2. **PROJECT-CONTRACT NUMBER:** Enter the project-contract number for this project as assigned by LDH. This number is usually the same as the PWSID for the water system with an additional -01 after, designating the first loan made to the system.
3. **BRIEF CONTRACT DESCRIPTION:** Briefly describe the work to be performed under the contract.
4. **LDH CONTRACT #:** Indicate the number given to this contract by LDH.
5. **DBE PRIME/ SUB CONTRACTOR NAME / ADDRESS / TELEPHONE / FAX NUMBERS:** List the names and all contact information of the DBE prime and DBE sub contractors expected to perform work during the construction of the project under the designated contract. \* Also, indicate if the subcontractor is going to hire other DBE sub-subcontractors. If so, identify those sub-subcontractors and provide the same requested information.
6. **CONTRACT AMOUNT:** Indicate the dollar amount for the contract and each subcontract.
7. **DESCRIPTION AND CATEGORY OF WORK:** Describe the work to be performed by the contractor and each subcontractor. Then check the appropriate category of work to be performed.
8. **DBE STATUS:** Indicate the appropriate DBE status of the contractor and each subcontractor listed in Item 5. Note: Designations should be consistent with how firms were identified during solicitations. List all designations that apply.
9. **FEDERAL TAX ID #:** : Indicate the Federal Tax ID number of the contractor and each subcontractor.

Drinking Water Revolving Loan Fund • DBE FORM 3  
**DBE SUBCONTRACTOR CONTACT LOG**

Louisiana Department Of Health · Office Of Public Health

Bidder Name: \_\_\_\_\_

Project Name: \_\_\_\_\_

Bidders should record their contacts with potential DBE subcontractors through the use of this log. Additional forms may be copied if needed.

\* Indicate if a subcontractor is going to hire other subcontractors. If so, an additional sheet listing them is required.

\*\* Bidders **MUST** attach copies of all faxes and/or letters sent to DBEs in order to solicit quotations.

	DBE Subcontractor Name / Address *	Telephone / Fax Number	DBE Status (Check all that apply)	Phone Contact		Contact Made?	Will Submit Quote?	Received Quote?	Notes
				Date of Fax / Letter **	Date of Call				
1			Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)						
2			Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)						
3			Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)						
4			Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)						
5			Minority (MBE) Black Native American Hispanic Asian Woman (WBE) Small (SBE) Small Rural Area (SBRA)						

*Drinking Water Revolving Loan Fund • DBE FORM 4*  
**DBE SUBCONTRACTOR BIDS LIST**

Louisiana Department Of Health · Office Of Public Health

Bidder Name: \_\_\_\_\_

Project: \_\_\_\_\_

Please list below all bids received from DBE firms and provide the requested information.

\* Indicate if the subcontractor is going to hire other subcontractors. If so, an additional sheet listing them is required.

DBE Subcontractor Name *	Description and Category of Work	Bid Amount	Bid to be Used?	Reason for Rejection
1	Supplies   Equipment   Services   Construction		Yes No	
2	Supplies   Equipment   Services   Construction		Yes No	
3	Supplies   Equipment   Services   Construction		Yes No	
4	Supplies   Equipment   Services   Construction		Yes No	
5	Supplies   Equipment   Services   Construction		Yes No	
6	Supplies   Equipment   Services   Construction		Yes No	
7	Supplies   Equipment   Services   Construction		Yes No	

# DBE LETTER OF INTENT

Louisiana Department Of Health · Office Of Public Health

To be used in lieu of a Contract Agreement between a Contractor and Disadvantaged Business Enterprise (DBE) firm.

Prime Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Subcontractor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

DBE Status (Check all that apply **AND ATTACH UNEXPIRED DBE CERTIFICATION**):

- Minority (MBE)      Black      Native American      Hispanic      Asian
- Woman (WBE)      Small (SBE)      Small Rural Area (SBRA)

Amount of Agreement: \_\_\_\_\_

Description of work to be performed under agreement with DBE firm:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Contractor intends to utilize the above named DBE firm for work and amount indicated above.

Contractor: \_\_\_\_\_  
Signature of Authorized Owner or Representative      Title      Date

Print Name: \_\_\_\_\_

DBE Firm\*: \_\_\_\_\_  
Signature of Authorized Owner or Representative      Title      Date

Print Name: \_\_\_\_\_

**\* Attach unexpired DBE Certification**

**DBE SUBCONTRACTOR PARTICIPATION FORM**

Louisiana Department Of Health · Office Of Public Health

**All Prime Contractors MUST PROVIDE this Form to their DBE Subcontractors.** This form gives a DBE subcontractor the opportunity to describe work received and/or report any concerns regarding this project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the LDH's DWRLF DBE Coordinator at any time during the project period of performance.

<u>Subcontractor Name:</u>	<u>Project Name:</u>
<u>Bid/Proposal ID</u>	<u>Point of Contact:</u>
<u>Address:</u>	
<u>Telephone Number:</u>	<u>Email Address:</u>
<u>Prime Contractor Name:</u>	<u>Issuing/Funding Entity:</u>

<b>Contract Item Number:</b>	<b>Description of Work Received from the Prime Contractor Involving Construction, Services, Equipment or Supplies:</b>	<b>Amount Received by Prime Contractor:</b>

*Please use the space below to report any concerns regarding this project:*

<b>Subcontractor Signature:</b>	<b>Print Name:</b>
<b>Title:</b>	<b>Date:</b>

**DBE SUBCONTRACTOR PERFORMANCE FORM**

Louisiana Department Of Health · Office Of Public Health

**All Prime Contractors MUST PROVIDE this Form to their DBE Subcontractors.** This form is intended to capture the DBE subcontractor's description of work to be performed and the price of the work submitted to the prime contractor. The DBE subcontractor can, as an option, complete and submit this form to the LDH's DWRLF DBE Coordinator at any time during the project period of performance.

<u>Subcontractor Name:</u>	<u>Project Name:</u>
<u>Bid/Proposal ID</u>	<u>Point of Contact:</u>
<u>Address:</u>	
<u>Telephone Number:</u>	<u>Email Address:</u>
<u>Prime Contractor Name:</u>	<u>Issuing/Funding Entity:</u>

<b>Contract Item Number:</b>	<b>Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies:</b>	<b>Price of Work Submitted to the Prime Contractor:</b>

**DBE Certified By\*:** \_\_\_ DOTD \_\_\_ NOSWB \_\_\_ Other: \_\_\_\_\_

**\*ATTACH UNEXPIRED DBE CERTIFICATION**

*I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).*

<b>Prime Contractor Signature:</b>	<b>Print Name:</b>
<b>Title:</b>	<b>Date:</b>
<b>Subcontractor Signature:</b>	<b>Print Name:</b>
<b>Title:</b>	<b>Date:</b>



EPA Project Control Number

United States Environmental Protection Agency  
Washington, DC 20460

## Certification Regarding Debarment, Suspension, and Other Responsibility Matters

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.  
Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, falsification or destruction of records, making false statements, or receiving stolen property;
- (b) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (c) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

\_\_\_\_\_  
Typed Name & Title of Authorized Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Representative

I am unable to certify to the above statements. My explanation is attached.



## Instructions

Under Executive Order 12549, an individual or organization debarred or excluded from participation in Federal assistance or benefit programs may not receive any assistance award under a Federal program, or a subagreement thereunder for \$25,000 or more.

Accordingly, each prospective recipient of an EPA grant, loan, or cooperative agreement and any contract or subagreement participant thereunder must complete the attached certification or provide an explanation why they cannot. For further details, see 40 CFR 32.510, Participants= responsibilities, in the attached regulation.

### **Where To Submit**

The prospective EPA grant, loan, or cooperative agreement recipient must return the signed certification or explanation with its application to the appropriate EPA Headquarters or Regional office, as required in the application instructions.

A prospective prime contractor must submit a completed certification or explanation to the individual or organization awarding the contract.

Each prospective subcontractor must submit a completed certification or explanation to the prime contractor for the project.

### **How To Obtain Forms:**

EPA includes the certification form, instructions, and a copy of its implementing regulation (40 CFR Part 32) in each application kit. Applicants may reproduce these materials as needed and provide them to their prospective prime contractor, who, in turn, may reproduce and provide them to prospective subcontractors.

Additional copies/assistance may be requested from:

Compliance Branch  
Grants Administration Division (PM-216F)  
U.S. Environmental Protection Agency  
401 M Street SW  
Washington, DC 20460  
(Telephone: 202/475-8025)

## CHECKLIST FOR PRIME CONTRACTORS' PAY APPLICATIONS

**PRIOR TO SUBMITTING ANY PAYMENT APPLICATIONS, the Prime Contractor must have submitted the following\* for review and approval in order to be 'Authorized to Receive Payment'** (\*Several other documents must also have been submitted by the Loan Recipient/Engineer and reviewed by LDH's DWRLF):

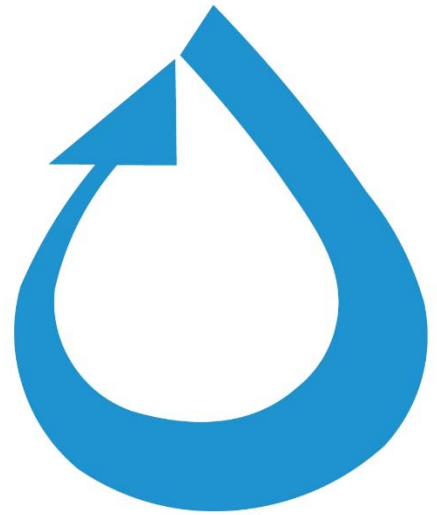
1	<b>Executed Contract</b> (LDH receives from Consultant Engineer)
2	Prime Contractor's <b>Notice to Proceed</b> (LDH receives from Consultant Engineer)
3	Contractor's <b>properly executed Disadvantaged Business Enterprise (DBE) forms</b> (including <u>DWRLF DBE Forms 1-Z</u> ) (LDH receives from Consultant Engineer and reviews for meeting program requirements)
4	Contractor's signed <b>Certificate of Non-segregated Facilities</b> (RF-212) (LDH receives from Consultant Engineer)
5	Contractor's signed <b>Certificate of Equal Opportunity Clause</b> (RF-211) (LDH receives from Consultant Engineer)
6	Contractor's signed <b>Certificate Referring to Debarment</b> (5700-49) (LDH receives from Consultant Engineer)
7	Contractor's <b>Payment Bond, Performance Bond, and Insurance Certificate</b> (LDH receives from Consultant Engineer and reviews for meeting program requirements)
8	Contractor's signed <b>DWRLF American Iron and Steel (AIS) Contractor Certification</b> (LDH receives from Consultant Engineer) or <b>DWRLF Build America Buy America (BABA) Contractor Certification</b>
N/A	A Prime Contractor's <b>'Authorization to Receive Payment' Letter</b> will be issued by LDH's DWRLF once all of the above items (and several other documents by the <u>Loan Recipient/Engineer</u> ) have been submitted and reviewed by LDH's DWRLF.

**FOR INITIAL and ROUTINE Prime Contractor Payment Applications to be considered complete for processing\*:** (\*Several other documents must also have been submitted by the Loan Recipient/Engineer and reviewed by LDH's DWRLF)

1	Did you get <b>Authorized to Receive Payment</b> by LDH's DWRLF? <i>If not, see above section to get authorized first.</i>
2	Have you <b>properly completed, executed, and submitted your Pay Application</b> including all required invoices ( <i>all invoices must show an invoice number</i> )?
3	Were any <b>Change Orders or Rebudgets</b> affecting this Payment Application submitted for review and approval? Did LDH approve? ( <i>These must be reviewed and approved by LDH in order to process the Pay Application</i> ).
4	Were all <b>Comments from the most recent DWRLF Construction Inspection properly addressed</b> ( <i>i.e. proper federally required signs posted at job site?, any outstanding payroll issues?, any outstanding American Iron and Steel issues?, etc.</i> )?
5	Have you and your Subcontractors submitted all <b>Payrolls for the period covered by the pay application</b> to the Davis Bacon and Related Acts (DBRA) Consultant for this project? Any <b>outstanding DBRA Payroll Issues</b> ? ( <i>Note that these must be provided in enough time to allow review by the DBRA Consultant for this project and LDH DWRLF prior to payment</i> ).
6	Were any <b>'DBRA Employee Wage Interviews'</b> needed by the DBRA Consultant for this pay application? ( <i>several interviews are required throughout a project, depending on project length and if any issues are found, especially INITIAL Interviews once construction has begun and FINAL Interviews once construction nears end</i> )
7	Did you execute and include the <b>DWRLF AIS/BABA Pay Request Certification</b> for this specific pay application? Any <b>outstanding AIS/BABA issues or Manufacturer Certifications needed for invoiced material</b> ? ( <i>even if AIS/BABA is not applicable to any components of the project, this certification can still be required from the Prime Contractor</i> )
N/A	An <b>LDH/DWRLF Construction Inspection</b> must also be performed and are typically done monthly to keep up with pay applications. If pay applications are submitted less often than monthly, more time should be allotted for the Construction Inspections to be arranged and performed

**FOR FINAL Prime Contractor Payment Applications to be considered complete for processing\* (in addition to the above 'ROUTINE' requirements):** (\*Several other documents must also have been submitted by the Loan Recipient/Engineer and reviewed by LDH's DWRLF)

1	Was a <b>Certificate of Substantial Completion</b> issued and signed by Eng and Owner?
2	Was a <b>Punch List</b> created and have all items on it been addressed?
3	Was a <b>Clear Lien (or Lien Waiver)</b> obtained and submitted for the project?
4	Have <b>As-Built Plans</b> and an <b>LDH Certificate of Construction</b> been submitted for the project?
5	Were all (including final) <b>Davis-Bacon and Related Act (DBRA) Payrolls for prime and all subs</b> submitted and <b>Employee Wage Interview</b> Requirements met?
6	Has all <b>AIS/BABA Requirement Documentation</b> been submitted for the project? ( <i>i.e. DWRLF AIS/BABA Pay Request Certification, Manufacturer Certifications, and/or Final De Minimis Waiver Components List with ALL invoices for any components not able to be certified by manufacturer</i> )



**DRINKING WATER**  
**REVOLVING LOAN FUND**

A PROGRAM OF THE DEPARTMENT OF HEALTH  
**LOUISIANA**

# DWRLF Project Sign Specifications and Guidance Document

## **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

The DWRLF Logo is a combined graphic, featuring both a stylized water drop/arrow, and a wordmark. These elements always appear together: the graphic must always appear in conjunction with the word mark.

**COLORS:** the full-color DWRLF logo colors are PMS Process Blue and PMS 368M Green for the words "Revolving Loan Fund". If printing in process color, the Process Blue equivalent should be:

100% Cyan  
10% Magenta  
0% Yellow  
10% Black

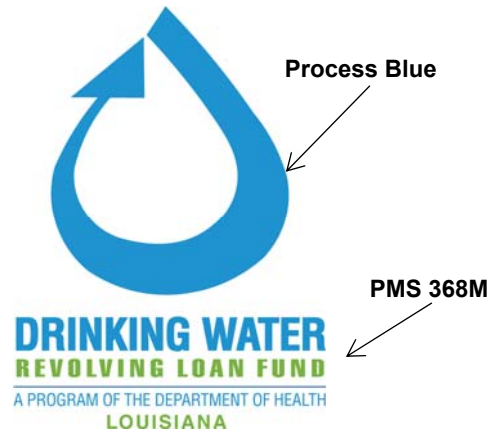
The PMS 368M equivalent is

57% Cyan  
0% Magenta  
100% Yellow  
0% Black

The logo should never be printed in colors other than these, nor should the colors be reversed (No green graphic with blue type, for example). Avoid printing this graphic against any other color or pattern. It should always be printed against a white background only. If it is necessary to print the logo against color, a reversed-out (white only) version has been provided, but this should be used sparingly.

When printing in one color only, an all-blue logo option has been provided. The logo should not be printed in any other color.

When printing in black only, or for other single color applications - fax cover sheets, embroidery, etc, - an all-black version has also been provided.



One Color option



Black option



Reverse option against black

## **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

For applications where a horizontal solution is required, a horizontal logo / wordmark combination has been provided.

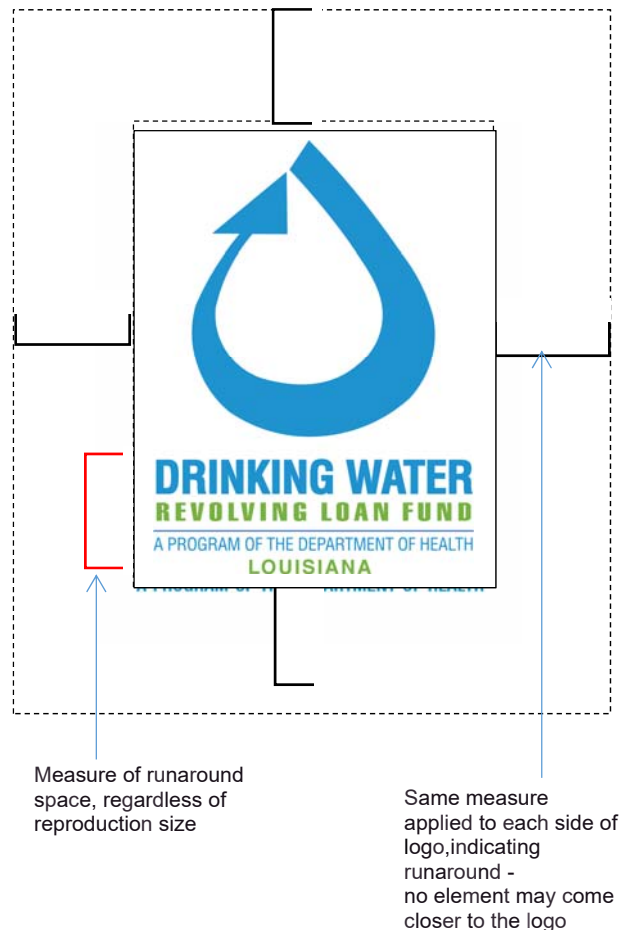


For small scale uses, such as imprinting on pencils, pen or other promotional items, a modified version of the logo has been provided. This small logo should not be used in any other setting and is not preferred.



### **Spacing:**

A border, or runaround, of white space must always surround the logo. The space should be equivalent to the vertical height of the word mark, or the type beneath the graphic element. This measure, regardless of the reproduction size of the logo, must be applied to each side of the logo. No element, whether graphic or typographic, should encroach on this runaround.



**DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

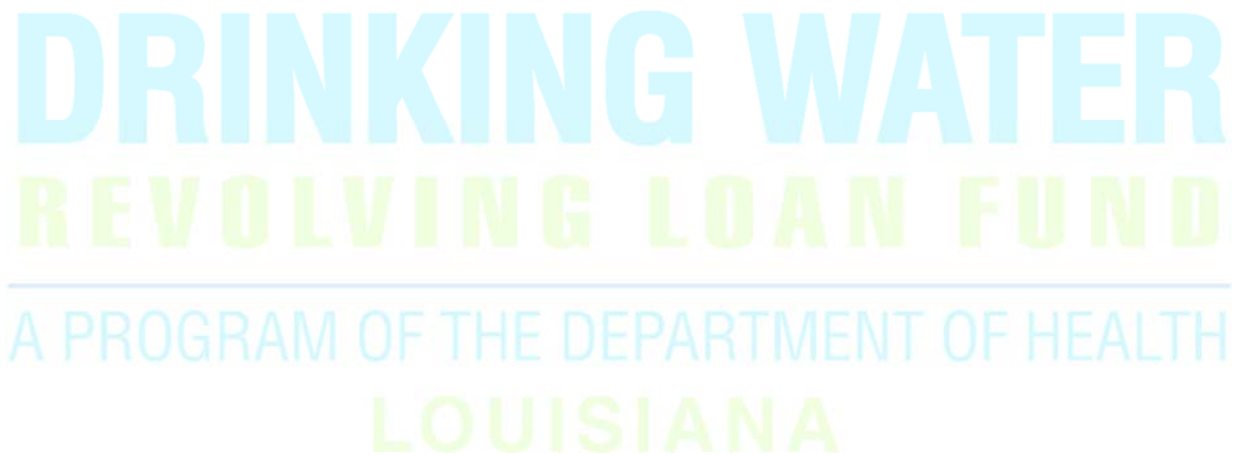
**Spacing Exceptions:**

When appropriate, the logo may be used as part of a "label", identifying the nature of the product (see example at right). The title should be placed under the word mark, at a leading consistent with the wordmark leading, and should not extend beyond the width of the logo. If the title is too long to fit within this space at a readable, size, it should be placed elsewhere, determined by design needs and other usage guidelines.



**Watermark:**

If the logo is used to watermark the pages of a document, the logo should be screened / opacity set at 15%. The size of the watermarked image will vary, depending on the kind of document, but should, in general, be centered on the page and have a height no less than 2/3 of the final printed page size.



# **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

**Misuse:**

Do NOT:

Print the logo in colors other than those specified:



**DRINKING WATER**  
**REVOLVING LOAN FUND**  
A PROGRAM OF THE DEPARTMENT OF HEALTH  
LOUISIANA

Allow other elements beyond the specified turnaround:

Lorem ipsum dolor sit amet, nec falli iisque similique no, dolore persequeris id vim. Eu omnesque epicurei partiendo mea. Usu in augue suavitate. Mei facer facilisis ne. Et vel partem corpora, quot



**DRINKING WATER**  
**REVOLVING LOAN FUND**  
PROGRAM OF THE DEPARTMENT OF HEALTH  
LOUISIANA

Stretch or otherwise distort the aspect ratio of the logo:



**DRINKING WATER**  
**REVOLVING LOAN FUND**  
A PROGRAM OF THE DEPARTMENT OF HEALTH  
LOUISIANA



**DRINKING WATER**  
**REVOLVING LOAN FUND**  
A PROGRAM OF THE DEPARTMENT OF HEALTH  
LOUISIANA

Rearrange the elements of the logo:

**DRINKING WATER**  
**REVOLVING LOAN FUND**  
A PROGRAM OF THE DEPARTMENT OF HEALTH  
LOUISIANA



**DRINKING WATER**  
**REVOLVING LOAN FUND**  
A PROGRAM OF THE DEPARTMENT OF HEALTH  
LOUISIANA



# **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

## **Fonts & Colors:**

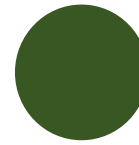
The typeface used in the wordmark is Helvetica LT Bold condensed. Display type, used in DWRLF printed material, is Seria Sans Bold.

For body copy, plain Helvetica is preferred, but any standard face may be used. Seria Sans should not be used for body copy.

Secondary colors: Recommended for solid color applications (T-shirts, etc.) and for general emphasis

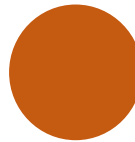
**HELVETICA LT BOLD  
CONDENSED**

**Seria Sans Bold**



PMS 655

PMS 357



PMS 146

PMS 103



PMS 656

PMS 421



# **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

## **Outdoor Project Sign:**

This is a 4' x 8' sign to be produced in outdoor rigid material, which can be plywood, metal, PVC or Coroplast, with a white background.

This sign is designed as a template to be filled out by the owners of individual water projects and displayed at the project site, with fonts common to Windows-based PCs (Arial Narrow Bold), colors and sizes specified in the file for ease of creation.

The sign can also be re-created with information below: where the DWRLF logo is 18 x 23 inches, the State of Louisiana logo is 9.4 inches and the LDH logo is 7 x 9.6 inches. Please note that the blue used in the border, line and text is the blue in the DWRLF logo.

Fonts: when possible, the specified DWRLF display font, Helvetica LT condensed Bold (or any Helvetica Condensed bold) should be used, with the project name on Pantone Process Blue and all other type in black. Type sizes are specified in the illustration below.

The logos are available in Line Art (EPS) form, with colors specified in the individual files, or high-resolution equivalents.

## **Example Project Sign**

**NOTE:** The PROJECT TITLE must be the name of the entire project covering the full loan amount (i.e. "2016 Water System Improvement Project") and not just the individual contract.

The PROJECT COST must be the full loan amount and not the individual contract amount (i.e. "PROJECT COST: \$11,000,000").

The image shows a template for an outdoor project sign. It features a white background with a blue border. The text is arranged as follows:

- Financed by:**  
**Louisiana Department of Health**  
**DRINKING WATER REVOLVING LOAN FUND/EPA**
- WATER IMPROVEMENT PROJECT TITLE**  
**WATER SYSTEM NAME**
- PROJECT COST**

Logos are positioned on the right and bottom:

- A large blue water drop logo with a circular arrow inside, representing the Drinking Water Revolving Loan Fund.
- The text **DRINKING WATER REVOLVING LOAN FUND** in blue and green, with **A PROGRAM OF THE DEPARTMENT OF HEALTH LOUISIANA** below it.
- The EPA logo at the bottom center.
- The State of Louisiana seal at the bottom center.
- The Louisiana Department of Health logo at the bottom right, with **LOUISIANA DEPARTMENT OF HEALTH** and *Public Health* below it.

**DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

**EPA LOGO & SEAL SPECIFICATIONS FOR SIGNAGE PRODUCED BY EPA ASSISTANCE AGREEMENT RECIPIENTS**

EPA's logo is a two-leaved flower, without stem, accompanied by the Agency's initials to the right. The EPA logo is the primary identifier for use on construction grant signage. Assistance agreement recipients are not required to receive EPA approval to use the EPA logo when used in accordance with the terms and conditions of their assistance agreement award.

The official seal of EPA is circular and is comprised of the two-leaved flower, with stem, encircled by the title UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. The EPA seal may be used only when official comparable seals are used and the recipient has received prior written EPA approval.

It is important that the EPA logo and seal always be reproduced with consistent high quality. The seal and logo must remain intact and unchanged (for example, don't use the flower from the seal by itself). The logo and seal may only be displayed using either the standard color scheme or a single color that complements the background where it appears.

**COLOR AND SPACING**

- The entire logo and seal must appear in black, gray, or any uniform color or knock out white on a dark background. The flower and text may not be different colors. The flower itself may not contain more than one color. The seal can be monotone or full color, based on the rest of the seals that it's placed with.
- The relationship between the flower portion of the logo and Helvetica type should never be shifted or adjusted.



**PREFERRED USE**

Use the preferred presentation of the logo on products that do not have enough space for the full logo with text. It may also be used in the presence of other logos.



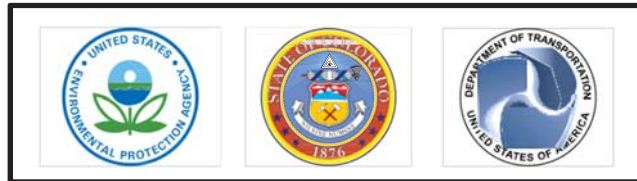
**SIZE AND LOGO WITH OTHER LOGOS**

It's important that all parts of the EPA logo be readable. The EPA logo should not be reproduced at sizes any smaller than 1.0" height on a sign. There are no maximum size restrictions as long as the clear space requirements are met. The logo should be made the same relative size as the other logos on the signage.



**SIZE AND SEAL WITH OTHER SEALS**

When there are multiple state or Federal seals/circular logos, the use of the EPA seal is appropriate with prior written EPA approval. The EPA seal should be the same size as the seals that accompany it and should be a minimum of 3 inches in height.



**IMPROPER LOGO USAGE**



# **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

## Louisiana Secretary of State

### STATE FLAG AND SEAL

Official Louisiana state flags are available for purchase from the Capitol Foundation by calling 225.342.0642.

Use the artwork below for all materials that display the state flag and seal. Please read the specifications below before altering the design in any way.



#### Specifications

The secretary of state is the custodian of the official artwork for the state flag and seal. This artwork, in the form of digital files, is to be used as is, reproduced in the manner specified below. No alteration of the artwork provided by the secretary of state is allowed except as provided below.

#### State Flag

For reproductive purposes, the following specifications shall be used:

The Louisiana flag contains two elements: a crest centered on a blue field.

The crest consists of a nest bearing three chicks, a mother pelican vulning herself with her head turned to the viewer's right and displaying three drops of blood on her breast. Beneath the nest a white banner bears the state motto "Union Justice Confidence."

## **DWRLF PROJECT SIGN SPECIFICATIONS AND GUIDANCE DOCUMENT**

The flag contains 12 Pantone colors printed on a white (PMS 000) background. The specified colors, location and use are as follows:

- PMS Cool Gray 8C – Pelican (gray – mother pelican)
- PMS Cool Gray 11C – Banner (gray – shadows)
- PMS 109C – Pelican Plumage (bright yellow – mother pelican’s head)
- PMS 497C – Pelican (dark brown – mother pelican’s bill, wings, bottom and nest)
- PMS 724C – Nest (chocolate brown)
- PMS 721C – Nest (tan)
- PMS 142C – Nest (golden tan)
- PMS 485C – Blood droplets (red – mother pelican)
- PMS 716C – Beak (orange – pelican chicks)
- PMS 145C – Beaks (burnt orange – mother pelican, chicks, mother’s plumage)
- PMS 295C – Background (dark blue)
- PMS IBlack C – Outlines

The flag shall be 7 units tall by 11 units wide.

The crest is to be treated as a single design element, inclusive of the mother pelican, chicks, nest and banner. For positioning purposes, the center of crest is the center of the triangle formed by three drops of blood.

The crest is centered both vertically and horizontally on the field. The crest, measured through the center vertically and horizontally, is 5 ¼ units tall (from tip of mother pelican’s head to the bottommost point of banner) by 6 units wide (from tip to tip of banner measured from lowest corner of each tip).

The official specifications do not call for other decorations, such as fringe, border, cords and the like. These are allowed for display purposes so long as they do not encroach on, obscure or alter the total flag image as specified above. (A gold fringe attached to the edges of the flag is acceptable, for example; a fringe, border or other decoration drawn or attached within the field itself or on the crest is not allowed.)

Note on font: The font used for the motto, although always treated as an inseparable element of the crest, is a hand-rendered font for specific use on the flag.

### **State Seal**

The secretary of state shall supply line art for the seal for metal casting embossed seals and seal devices.

The seal consists of a central crest within a circle and an outer circle bearing the state name and ornamentation. Artwork is identical to the flag’s crest but displayed without the banner.

The motto is circumscribed around the crest with: “Union Justice” above the Pelican, the words separated by a single bullet, and “Confidence” below the crest, bracketed by bullets. The font is the same hand-rendered font as on the state flag.

“State of Louisiana” shall appear in the outer circle and uppermost on the seal, circumscribed along the uppermost portion of the outer circle. The font for this shall be AgaramondPro-Bold (OpenType).

The state seal shall be reproduced in full, four-color process printing using files provided by the Louisiana Secretary of State’s Office, or in black and white using only line art supplied by the Louisiana Secretary of State’s Office.

The artwork supplied by the secretary of state is to be used as-is with no alterations except sizing as needed. Louisiana state agencies and departments may, however, adopt the seal as their own by adding the agency or departmental name, using the designated font, circumscribed along the bottom portion of the outer circle; the same circle in which “State of Louisiana” is placed.

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# INVESTING IN AMERICA

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## Investing In America Signage Guidelines

The Bipartisan Infrastructure Law

The CHIPS and Science Act

The Inflation Reduction Act

The American Rescue Plan



## Guidelines for Logo Applications

The purpose of this document is to provide general guidelines for signs displayed at project sites for projects funded under the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act), the CHIPS and Science Act, the Inflation Reduction Act, the American Rescue Plan, and other Federally-funded projects as appropriate. The first part of this document pertains to signs for Federally-funded projects that are not installed in the highway right-of-way. For highway signage guidance that is MUTCD compliant please see pages 13 and 14. For all other signs please start here. This document provides information about the Investing In America logo mark as well as how logos, marks and seals of states, cities, and counties can be incorporated into signage. Logos of contractors are not permitted on the signage. When logos are included in signage, the placement should conform to these brand guidelines.

## Variations and Usage

There is one approved mark associated with the Investing In America logo. To preserve the integrity of the Investing In America logo mark, make sure to apply them correctly. Altering, distorting, or recreating the 'marks' in any way weakens the power of the image and what it represents. Layout and design of signs and communication materials will vary, so care must be taken when applying the logo mark.

## Primary Logo Mark

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# INVESTING IN AMERICA

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## Colors

The colors, graphics, and fonts used should conform to graphic standards.

COLOR	CMYK	RGB	HEX	PMS
 <b>Blue</b>	83, 48, 0, 48	22 / 68 / 132	#164484	PMS 7687 C
 <b>Red</b>	0, 100, 81, 0	255 / 0 / 49	#FF0031	PMS 185 C
 <b>White</b>	2, 2, 0, 3	242 / 244 / 248	#F2F4F8	Bright White

Logos



White background: logo in red and blue



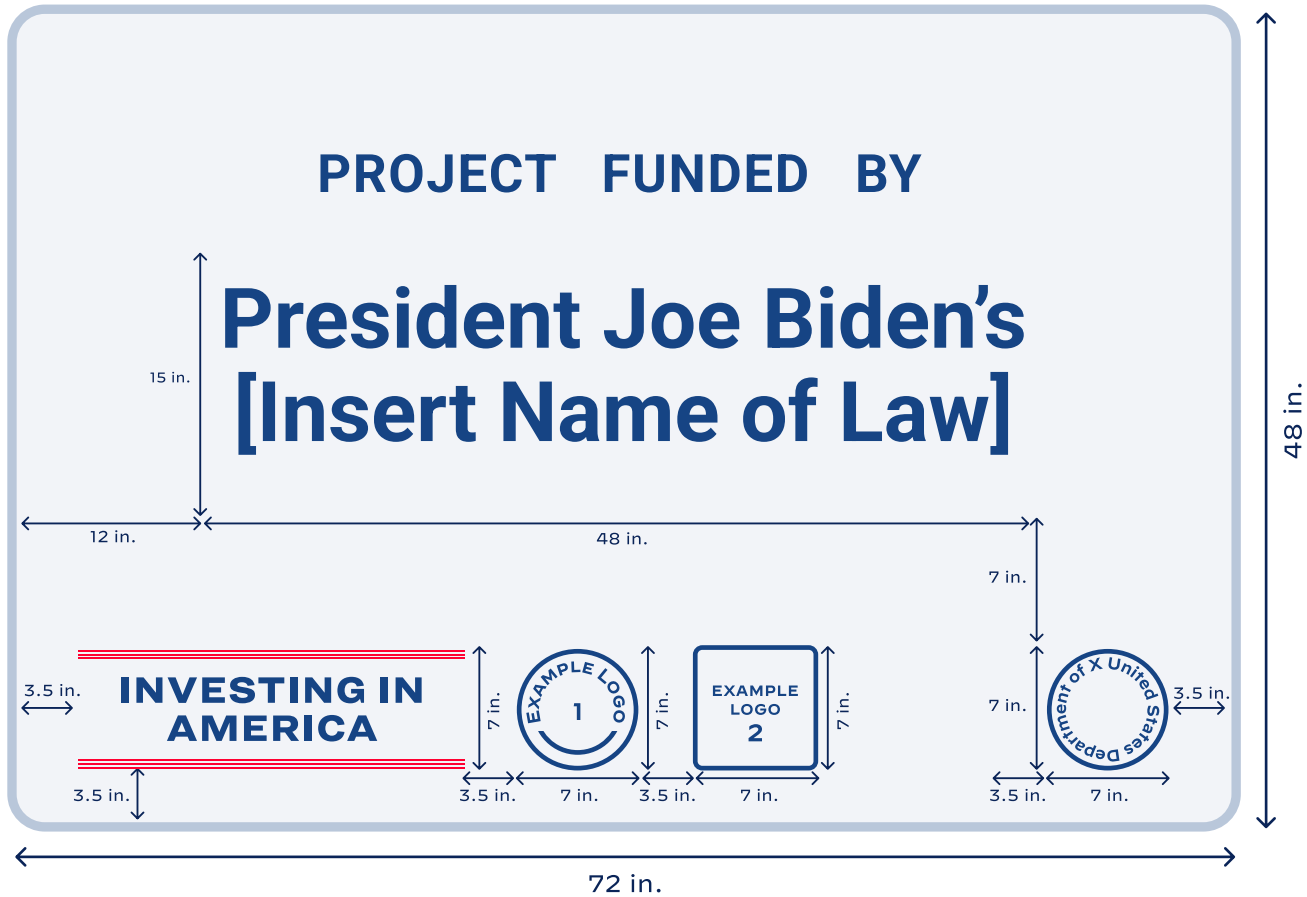
Gray background: logo in red and blue



Blue background: logo in all white



# Investing In America General Guidelines for Logo Applications



# Sign Colors

## 1. The Bipartisan Infrastructure Law



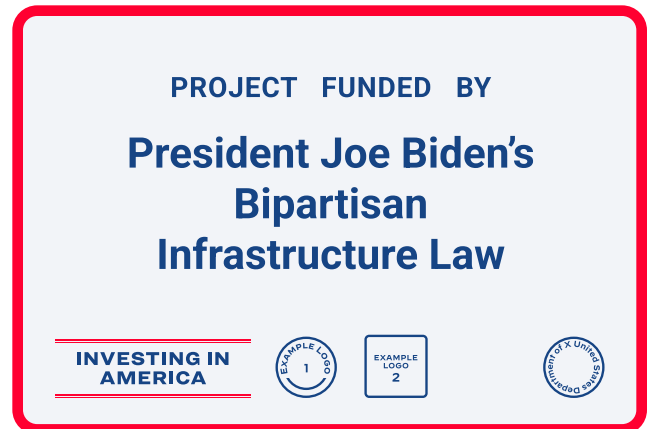
White



Gray



Blue



Red Border

## Sign Colors

### 2. The CHIPS and Science Act



White



Gray



Blue



Red Border

## Sign Colors

### 3. The Inflation Reduction Act



White



Gray



Blue



Red Border

## Sign Colors

### 4. The American Rescue Plan



White



Gray



Blue



Red Border

## State, City, and County Logo Variations



Square or Circular State Logo: 7x7 in.



Rectangular or Oval State Logo: **not** to exceed 17.5 x 7 in.

### 3 Logo Samples



Circular City Logo 7 x 7 in. State rectangular logo should **not** exceed 17.5 x7 in.



Rectangular State Logo: **not** to exceed 17.5 x 7 in.

## 2 Logo Samples



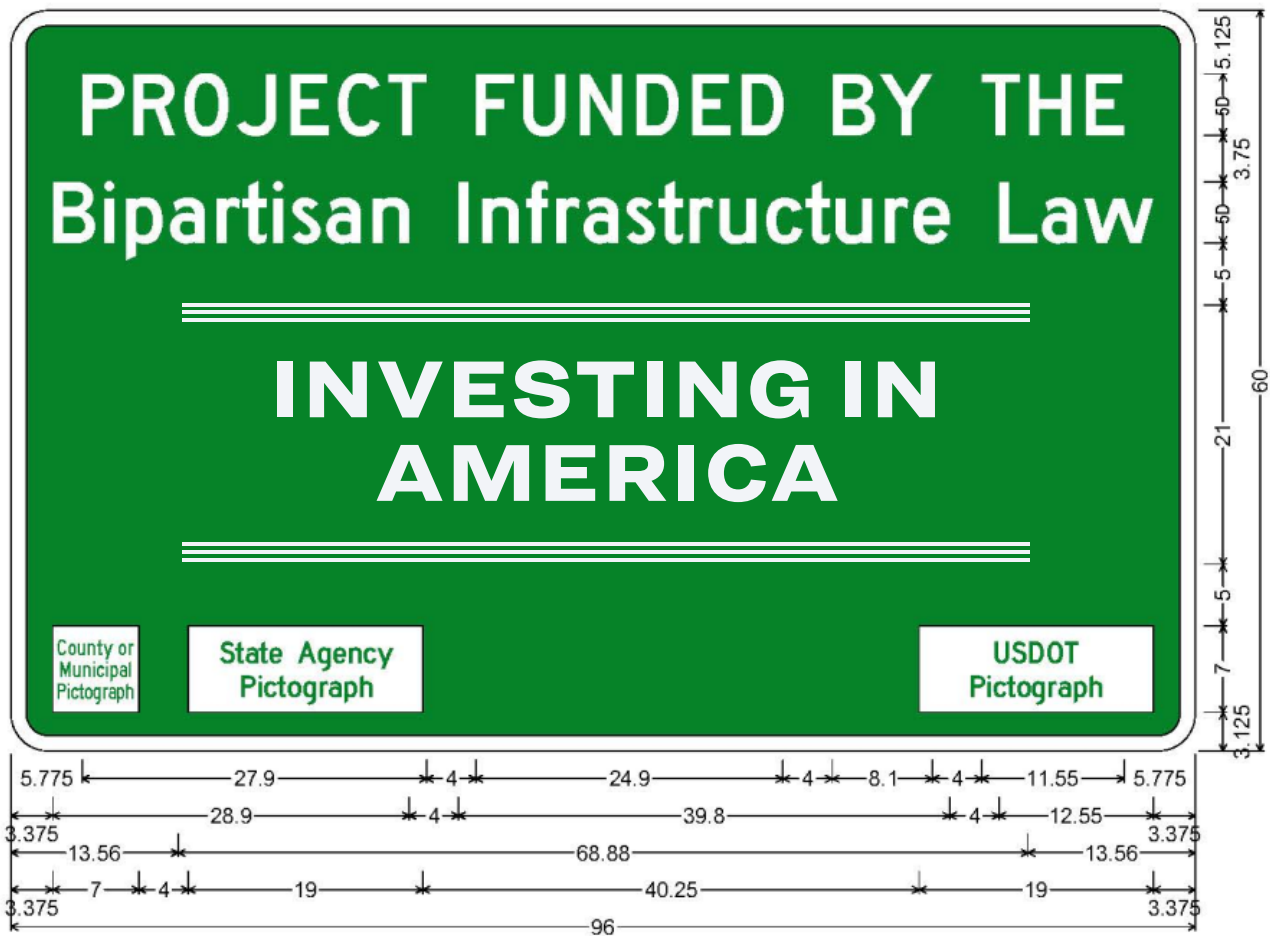
Circular State Logo: 7 x 7 in.



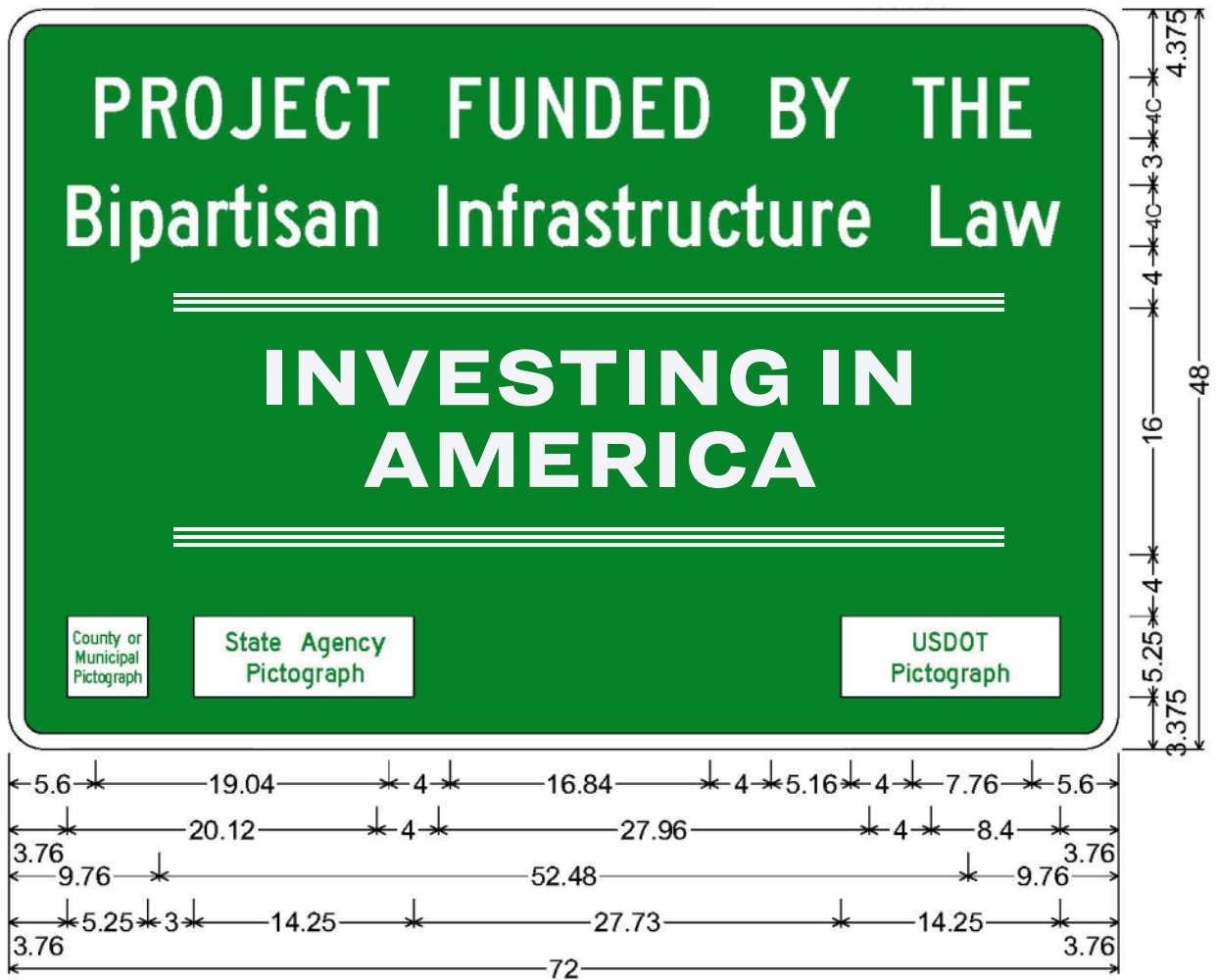
Rectangular State Logo: **not** to exceed 17.5 x 7 in.



## Rules for Highway Right of Way Signage 8 Feet



## Rules for Highway Right of Way Signage 6 Feet





EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

April 18, 2022

M-22-11

MEMORANDUM FOR HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Shalanda D. Young  
Director

SUBJECT: Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act (“IIJA”), Pub. L. No. 117-58, which includes the Build America, Buy America Act (“the Act”). Pub. L. No. 117-58, §§ 70901-52. The Act strengthens Made in America Laws<sup>1</sup> and will bolster America’s industrial base, protect national security, and support high-paying jobs. The Act requires that no later than May 14, 2022—180 days after the enactment of the IIJA—the head of each covered Federal agency<sup>2</sup> shall ensure that “none of the funds made available for a Federal financial assistance program for infrastructure, including each deficient program, may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States.”<sup>3</sup>

The Act affirms, consistent with Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America’s Workers* (“the Executive Order”), this Administration’s priority to “use terms and conditions of Federal financial assistance awards to maximize the use of goods, products, and materials produced in, and services offered in, the United States.”<sup>4</sup>

The Act provides statutory authorities for the Made in America Office (“MIAO”) in the Office of Management and Budget (“OMB”) to maximize and enforce compliance with Made in

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<sup>1</sup> “Made in America Laws” means all statutes, regulations, rules, and Executive Orders relating to Federal financial assistance awards or Federal procurement, including those that refer to “Buy America” or “Buy American,” that require, or provide a preference for, the purchase or acquisition of goods, products, or materials produced in the United States, including iron, steel, and manufactured products offered in the United States. Made in America Laws include laws requiring domestic preference for maritime transport, including the Merchant Marine Act of 1920 (Pub. L. No. 66-261), also known as the Jones Act. Exec. Order No. 14,005, 86 Fed. Reg. 7475, § 2(b) (Jan. 28, 2021), available at <https://www.federalregister.gov/documents/2021/01/28/2021-02038/ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers>. Made in America Laws also include laws that give preference to Indian-owned and -controlled businesses, such as the Buy Indian Act (25 U.S.C. 47), that produce items in the United States.

<sup>2</sup> For the purposes of this guidance, the terms “Federal agency” and “agency” mean any authority of the United States that is an “agency” (as defined in section 3502 of title 44, United States Code), other than an independent regulatory agency (as defined in that section). IIJA, § 70912(3).

<sup>3</sup> IIJA, § 70914(a).

<sup>4</sup> Exec. Order No. 14,005 (see footnote 1).

America Laws.<sup>5</sup> MIAO aims to increase reliance on domestic supply chains and reduce the need for waivers through a strategic process aimed at: achieving consistency across agencies; gathering data to support decision-making to make U.S. supply chains more resilient; bringing increased transparency to waivers in order to send clear demand signals to domestic producers; and concentrating efforts on changes that will have the greatest impact.<sup>6</sup>

This memorandum provides implementation guidance to Federal agencies on the application of: (1) a “Buy America” preference<sup>7</sup> to Federal financial assistance programs for infrastructure; and (2) a transparent process to waive such a preference, when necessary. A Federal financial assistance program for infrastructure is any program under which an award may be issued for an infrastructure project, regardless of whether infrastructure is the primary purpose of the award. The term “project” means any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States.<sup>8</sup>

Agencies should determine how this guidance is best applied to their infrastructure programs and processes, and consult with OMB, as needed, on establishing criteria, processes, and procedures for applying a Buy America preference and issuing waivers. OMB may update or provide additional guidance, as appropriate, to further assist agencies in the implementation of a Buy America preference.

## **I. Application of a Buy America Preference**

By May 14, 2022, agencies must ensure that all applicable programs comply with section 70914 of the Act, including by the incorporation of a Buy America preference in the terms and conditions of each award with an infrastructure project.<sup>9</sup> The Act requires the following Buy America preference:

- (1) All iron and steel used in the project are produced in the United States. This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) All manufactured products used in the project are produced in the United States. This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.

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<sup>5</sup> IJA, § 70923(a) & (b)(1).

<sup>6</sup> OMB Memorandum M-21-26, Increasing Opportunities for Domestic Sourcing and Reducing the Need for Waivers from Made in America Laws available at: <https://www.whitehouse.gov/wp-content/uploads/2020/11/M-21-06.pdf>

<sup>7</sup> For the purposes of this guidance, a “Buy America” preference is a domestic content procurement preference as defined in IJA, § 70912(2).

<sup>8</sup> IJA, § 70912 (5) & (7).

<sup>9</sup> See Appendix I: Example of Award Term - Required Use of American Iron, Steel, Manufactured Products, and Construction Materials.

- (3) All construction materials are manufactured in the United States. This means that all manufacturing processes for the construction material occurred in the United States.<sup>10, 11</sup>

## **II. Applicability to Federal Financial Assistance Programs**

This guidance applies to all Federal financial assistance as defined in section 200.1 of title 2, Code of Federal Regulations<sup>12</sup>—whether or not funded through IIJA—where funds are appropriated or otherwise made available and used for a project for infrastructure. Federal financial assistance means assistance that non-Federal entities receive or administer in the form of grants, cooperative agreements, non-cash contributions or donations of property, direct assistance, loans, loan guarantees, and other types of financial assistance. The term “non-Federal entity” includes States, local governments, territories, Indian tribes, Institutions of Higher Education (IHE), and nonprofit organizations.<sup>13</sup>

For purposes of this guidance, for-profit organizations are not considered non-Federal entities. However, this guidance does not alter independent statutory authorities that agencies may have to include domestic content requirements in awards of Federal financial assistance issued to for-profit organizations.

Federal agencies are encouraged to consult with OMB if they are uncertain about the applicability of this guidance to any particular infrastructure program.

Before applying a Buy America preference to a covered program that will affect Tribal communities, Federal agencies should follow the consultation policies established through Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*, and consistent with policies set forth in the Presidential Memorandum of January 26, 2021, on Tribal Consultation and Strengthening Nation-Nation Relationships. Federal agencies should commence consultation promptly.

This guidance does not apply to “expenditures for assistance authorized under section 402, 403, 404, 406, 408, or 502 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170a, 5170b, 5170c, 5172, 5174, or 5192) relating to a major disaster or emergency declared by the President under section 401 or 501, respectively, of such Act (42 U.S.C. 5170, 5191) or pre and post disaster or emergency response expenditures.”<sup>14</sup> “[P]re and post disaster or emergency response expenditures” consist of expenditures for financial assistance that are (1) authorized by statutes other than the Stafford Act, 42 U.S.C. §§ 5121 et seq., and (2) made in anticipation of or response to an event or events that qualify as an “emergency” or “major disaster” within the meaning of the Stafford Act, *id.* § 5122(1), (2). Awards made to support the construction or improvement of infrastructure to mitigate the damage that may be caused by a non-imminent future emergency or disaster, such as awards

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<sup>10</sup> IIJA, § 70912 (2) & (6)(B)(ii).

<sup>11</sup> See Section VIII. of this guidance for more information on construction materials.

<sup>12</sup> IIJA § 70912(4)(A)

<sup>13</sup> See 2 C.F.R. § 200.1.

<sup>14</sup> IIJA § 70912(4)(B)

made under FEMA’s Flood Mitigation Assistance program,<sup>15</sup> do not qualify as “pre and post disaster or emergency response expenditures.”

Subawards should conform to the terms and conditions of the Federal award from which they flow.<sup>16</sup>

The IIJA’s definition of “infrastructure” encompasses public infrastructure projects. Thus, the term “infrastructure” includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property.<sup>17</sup> Agencies should treat structures, facilities, and equipment that generate, transport, and distribute energy - including electric vehicle (EV) charging - as infrastructure.

When determining if a program has infrastructure expenditures, Federal agencies should interpret the term “infrastructure” broadly and consider the definition provided above as illustrative and not exhaustive. When determining if a particular construction project of a type not listed in the definition above constitutes “infrastructure,” agencies should consider whether the project will serve a public function, including whether the project is publicly owned and operated, privately operated on behalf of the public, or is a place of public accommodation, as opposed to a project that is privately owned and not open to the public. Projects with the former qualities have greater indicia of infrastructure, while projects with the latter quality have fewer. Projects consisting solely of the purchase, construction, or improvement of a private home for personal use, for example, would not constitute an infrastructure project. Federal agencies are strongly encouraged to consult with OMB when making such determinations.

Agencies should consult with MIAO regarding their readiness to apply the requirements of the Act to covered programs. Agencies with questions regarding the application of a Buy America preference to agency-specific programs, including questions about the possible use of waivers during adjustment periods as agencies work to implement the Act, are advised to reach out to MIAO for technical assistance and advice.

### **III. Consistency with International Agreements**

Pursuant to section 70914(e) of the Act, this guidance must be applied in a manner consistent with the obligations of the United States under international agreements.

### **IV. Avoid Unnecessary Disruption**

The Act makes clear that its preferences apply to a Federal financial assistance program for infrastructure only to the extent that a domestic content procurement preference as described

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<sup>15</sup> See 42 U.S.C. § 4104c.

<sup>16</sup> 2 CFR 200.101 (b) (2)

<sup>17</sup> IIJA, § 70912(5).

in section 70914 of the Act does not already apply to iron, steel, manufactured products, and construction materials.<sup>18</sup> Agencies should consider whether existing domestic content requirements meet the standards in the Act, as described in this memorandum. Agencies must make necessary changes to come into compliance with the Act's requirements, while preserving policies and provisions that already meet or exceed the standards required by the Act. For example, a program in which the standards for iron and steel already meet the standards in the Act may nevertheless be required to adopt new standards for manufactured products and construction materials. Maintaining current policies where appropriate avoids unnecessary disruption to programs, or elements of programs, that already meet or exceed Build America, Buy America requirements.

## **V. Effective Date for Awards**

Agencies must ensure that, starting on May 14, 2022, all Federal financial assistance programs for infrastructure comply with the requirements of section 70914 of the Act. Therefore, new awards made on or after May 14, 2022, must take appropriate steps to ensure financial assistance awards comply with these requirements, which may include appropriate terms and conditions<sup>19</sup> incorporating a Buy America preference. Renewal awards and amendments obligating additional funds to existing awards that are executed on or after May 14, 2022, must also include a Buy America preference. This means that agencies must include a Buy America preference in awards issued on or after May 14, 2022, even if Notices of Funding Opportunities for those awards did not include a Buy America preference. In these cases, agencies may consider whether public interest waivers may be needed to avoid undue increases in the time and cost of a project. Similarly, public interest waivers may be needed for awards and amendments made on or after May 14, 2022, where budgets for purchase of covered materials have already been agreed upon (including if materials have been ordered and construction has begun). Consistent with the guidance provided below, agencies should issue waivers judiciously and clearly communicate to recipients the limitations and conditions of any such waivers.

## **VI. Articles, Materials, and Supplies for Infrastructure**

A Buy America preference, as defined in section I of this guidance, only applies to the iron and steel, manufactured products, and construction materials used for the infrastructure project under an award. If an agency has determined that no funds from a particular award under a covered program will be used for infrastructure, a Buy America preference does not apply to that award. Similarly, for a covered program, a Buy America preference does not apply to non-infrastructure spending under an award that also includes a covered project. A Buy America preference applies to *an entire infrastructure project*, even if it is funded by both Federal and non-Federal funds under one or more awards.

A Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply

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<sup>18</sup> IIA, § 70917(a) &(b).

<sup>19</sup> See Appendix I: Example of Award Term - Required Use of American Iron, Steel, Manufactured Products, and Construction Materials for exemplary language.

to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of or permanently affixed to the structure.

For the purposes of this guidance, an article, material, or supply should only be classified into *one* of the following categories: (1) iron or steel; (2) a manufactured product; or (3) a construction material. For ease of administration, an article, material, or supply should not be considered to fall into multiple categories. Agencies should apply the iron and steel test to items that are predominantly iron or steel, unless another standard applies under law or regulation.

Any waivers from these requirements must be in writing and meet the requirements of section 70914(b).

## **VII. Issuing Buy America Waivers**

Pursuant to Section 70914(c) of the Act, the head of a Federal agency may waive the application of a Buy America preference under an infrastructure program in any case in which the head of the Federal agency finds that—

- (1) applying the domestic content procurement preference would be inconsistent with the public interest (a “public interest waiver”);
- (2) types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality (a “nonavailability waiver”); or
- (3) the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent (an “unreasonable cost waiver”).

Federal agencies are responsible for processing and approving all waivers, including waivers requested by recipients and on behalf of subrecipients. To the greatest extent practicable, waivers should be targeted to specific products and projects.<sup>20</sup>

Before issuing a waiver, the head of the Federal agency must make publicly available on the agency’s website a detailed written explanation for the proposed determination to issue the waiver and provide at least 15 days for public comment on the proposed waiver.<sup>21</sup> General applicability waivers are subject to a minimum 30-day public comment period.<sup>22</sup> By April 29, 2022, agencies should provide the website address where they will be posting proposed waivers for public comment to [MBX.OMB.MadeInAmerica@omb.eop.gov](mailto:MBX.OMB.MadeInAmerica@omb.eop.gov). Pursuant to sections 70914(c) and 70937 of the Act, the waiver must be cross-posted to a centralized waiver transparency website managed by GSA, [BuyAmerican.gov](http://BuyAmerican.gov),<sup>23</sup> no later than November 15, 2022.

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<sup>20</sup> See Section VII of this guidance for information on waiver principles and criteria.

<sup>21</sup> Executive Order, § 4(b)(i)(2); IJJA, § 70914(c); IJJA, § 70937 (note that “Buy American” as used in this section also refers to Buy America preferences, per IJJA, § 70932(1)).

<sup>22</sup> IJJA § 70914(d)(2)(A)(ii). See Section VII of this guidance for information on general applicability waivers.

<sup>23</sup> [BuyAmerican.gov](http://BuyAmerican.gov) redirects to [MadeInAmerica.gov](http://MadeInAmerica.gov).



To minimize duplication and promote efficiency, MIAO and GSA will coordinate with agencies on the expansion of the existing website's functionality to display waivers for Federal financial assistance and provide further instructions to agencies as necessary.

Federal agencies are responsible for performing due diligence and approving or rejecting waivers consistent with the Act, this guidance, and any other applicable Buy America laws. Federal agencies should notify MIAO in advance of posting an award- or project-level proposed waiver for public comment. However, Federal agencies must consult with MIAO for proposed waivers with broader applicability (such as a general applicability waiver) before posting them for public comment. The purpose of the consultation is to identify any opportunities to structure the waiver in order to maximize the use of goods, products, and materials produced in the United States to the greatest extent possible consistent with law. Federal agencies should send proposed waivers for review to [MBX.OMB.MIAwaivers@omb.eop.gov](mailto:MBX.OMB.MIAwaivers@omb.eop.gov).

Federal agencies must submit to MIAO a proposed waiver for review after the public comment period has concluded. MIAO will review the proposed waiver to determine if it is consistent with applicable law and policy,<sup>24</sup> and will notify the Federal agency of its determination.

All waiver requests must include a detailed justification for the use of goods, products, or materials mined, produced, or manufactured outside the United States<sup>25</sup> and a certification that there was a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with potential suppliers.<sup>26</sup> In addition, at a minimum and to the greatest extent practicable, each proposed waiver submitted to MIAO should include the following information, as applicable:

- Waiver type (nonavailability, unreasonable cost, or public interest)
- Recipient name and Unique Entity Identifier (UEI)
- Federal awarding agency organizational information (e.g., Common Government-wide Accounting Classification (CGAC) Agency Code)
- Financial assistance listing name and number
- Federal financial assistance program name
- Federal Award Identification Number (FAIN) (if available)
- Federal financial assistance funding amount
- Total cost of infrastructure expenditures, including all Federal and non-Federal funds (to the extent known)
- Infrastructure project description and location (to the extent known)
- List of iron or steel item(s), manufactured products, and construction material(s) proposed to be excepted from Buy America requirements, including name, cost, country(ies) of origin (if known), and relevant PSC and NAICS code for each.
- A certification that the Federal official or assistance recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with the prime contractor.

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<sup>24</sup> Executive Order, § 4(c).

<sup>25</sup> IIJA, § 70937(c)(2)(A).

<sup>26</sup> IIJA, § 70937(c)(2)(D).

- A statement of waiver justification, including a description of efforts made (e.g., market research, industry outreach), by the Federal awarding agency and, and in the case of a project or award specific waiver, by the recipient, in an attempt to avoid the need for a waiver. Such a justification may cite, if applicable, the absence of any Buy America-compliant bids received in response to a solicitation.
- Anticipated impact if no waiver is issued.
- Any relevant comments received through the public comment period.

The purpose of the information is to ensure that the agency has adequate information to perform due diligence, that MIAO has sufficient information to determine whether the proposed waiver is consistent with law and policy, and that sufficient information is available for public review. Information provided for public review should help interested manufacturers gauge the demand for products for which agencies are considering waiving a Buy America preference.

To avoid a need for duplicative waiver requests from entities that receive funding for one infrastructure project through multiple Federal agencies, the Federal agency contributing the greatest amount of Federal funds for the project should be considered the “Cognizant Agency for Made in America” and should take responsibility for coordinating with the other Federal awarding agencies. Such coordination will provide uniform waiver criteria and adjudication processes, minimize duplicative efforts among Federal agencies, and reduce burdens on recipients. The Cognizant Agency for Made in America shall be responsible for consulting with the other Federal awarding agencies, publicizing the proposed joint waiver, and submitting the proposed joint waiver for review to MIAO.

*a. Exceptions for Unforeseen and Exigent Circumstances*

In limited situations where there is an urgent need in an unforeseen and exigent circumstance, agencies have the authority to waive the application of Buy America preferences without submitting the waiver for public comment and MIAO determination.<sup>27</sup> As an exception to the public transparency requirements of the Act, agencies should exercise that authority only when necessary. Further, to ensure MIAO can fulfill its role as a central and transparent source of Made in America waivers, an agency that issues a waiver without first seeking public comment and MIAO approval must, within 30 days of the waiver’s issuance, submit a report to MIAO explaining its reliance upon the “unforeseen and exigent circumstance” exception.<sup>28</sup> MIAO will provide further instructions to agencies on how to submit those reports. Although public posting and MIAO review may be waived in exigent circumstances, agencies remain responsible for performing due diligence appropriate to the circumstances, consistent with the principles and criteria in paragraphs VII(b) and (c) below.

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<sup>27</sup> IJA, § 70937(b)(2).

<sup>28</sup> This reporting process was established pursuant to Executive Order 14,005, § 4(d) and OMB Guidance on Improving the Transparency of Made in America Waivers available at: <https://www.whitehouse.gov/wp-content/uploads/2021/10/Guidance-Memo-Improving-the-Transparency-of-Made-in-America-Waivers.pdf>.

b. *Waiver Principles and Criteria*

To ensure they are scrupulously monitoring, enforcing, and complying with applicable Buy America Laws and minimizing the use of waivers,<sup>29</sup> agencies must apply standard criteria to determine whether to grant a waiver in a given circumstance. Agencies with existing criteria must review it for consistency with this guidance and update it as appropriate. All other agencies must establish criteria.

Agencies may reject or grant waivers in whole or in part. To the greatest extent practicable, waivers should be issued at the project level and be product-specific. Overly broad waivers undermine market signals designed to boost domestic supply chains, particularly for key articles, materials and supplies in critical supply chains (i.e., critical supply chains identified in Executive Order 14017, *America's Supply Chains*). When necessary, agencies may consider issuing a waiver that has applicability beyond a single project; however, agencies should always issue, construe, and apply waivers to ensure the maximum utilization of goods, products, and materials produced in the United States, consistent with applicable law. Federal agencies may consult with MIAO when establishing or modifying criteria for granting waivers. They may also work within the Made in America Council, a practice that will help to foster consistency across agencies to the greatest extent practical and appropriate, given agency and program missions.

Federal agencies should use the following principles before issuing a waiver of any type:

- **Time-limited:** In certain limited circumstances, a Federal agency may determine that a waiver should be constrained principally by a length of time, rather than by the specific projects to which it applies. Waivers of this type may be appropriate, for example, when an item that is “nonavailable” is widely used in projects funded by a particular program’s awards. When issuing such a waiver, the agency should identify a short, definite time frame (e.g., no more than one to two years) designed to ensure that, as domestic supply becomes available, domestic producers will have prompt access to the market created by the program.
- **Targeted:** Waivers that are not limited to particular projects should apply only to the item(s), product(s), or material(s) or category(ies) of item(s), product(s), or material(s) necessary. Waivers that are overly broad will tend to undermine domestic preference policies. Broader waivers will receive greater scrutiny from MIAO.
- **Conditional:** Federal agencies are encouraged to issue waivers with specific conditions that support the policies of the Act and the Executive Order.

These principles and criteria should be viewed as minimum requirements for the use of waivers by Federal agencies.<sup>30</sup>

### Nonavailability Waivers

Before granting a nonavailability waiver, agencies should consider whether the recipient has performed thorough market research, which may be accomplished with assistance from the agency, and adequately considered, where appropriate, qualifying alternate items, products, or

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<sup>29</sup> IJA § 70933(2).

<sup>30</sup> See Section IV. of this guidance for agencies that have existing regulations or guidance.

materials. Waivers should describe the market research activities and methods to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources. Agencies are encouraged to engage with the Made in America Council to develop resource lists for common items, goods, or materials.

### Unreasonable Cost Waivers

An unreasonable cost waiver is available if the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent. Before granting an unreasonable-cost waiver, to the extent permitted by law, agencies should ensure the recipient has provided adequate documentation that no domestic alternatives are available within this cost parameter. Agencies may assist recipients in gathering documentation.

For requests citing unreasonable cost as the statutory basis of the waiver, the waiver justification must include, as applicable, a comparison of the cost of the domestic product to the cost of the foreign product or a comparison of the overall cost of the project with domestic products to the overall cost of the project with foreign-origin products, pursuant to the requirements of the applicable Made in America law.<sup>31</sup> Publicly available cost comparison data may be provided in lieu of proprietary pricing information.<sup>32</sup> Unreasonable-cost waivers should be no broader than necessary.

### Public Interest Waivers

A waiver in the public interest may be appropriate where an agency determines that other important policy goals cannot be achieved consistent with the Buy America requirements established by the Act and the proposed waiver would not meet the requirements for a nonavailability or unreasonable cost waiver. Such waivers shall be used judiciously and construed to ensure the maximum utilization of goods, products, and materials produced in the United States.<sup>33</sup> To the extent permitted by law, determination of public interest waivers shall be made by the head of the agency with the authority over the Federal financial assistance award.<sup>34</sup>

Public interest waivers may have a variety of bases. As with other waivers, they should be project-specific whenever possible, as what is in the public interest may vary depending upon the circumstances of the project, recipient, and specific items, products, or materials in question.

Federal agencies may wish to consider issuing a limited number of general applicability public interest waivers in the interest of efficiency and to ease burdens for recipients. The agency remains responsible for determining whether such a waiver is appropriate to apply to any

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<sup>31</sup> IIJA, § 70937(c)(2)(B).

<sup>32</sup> IIJA, § 70937(c)(2)(B).

<sup>33</sup> IIJA, § 70935(a).

<sup>34</sup> IIJA, § 70935(b).

given project; the Made in America Office will not review each application of such a waiver. The following are examples of types of public interest waivers an agency may consider issuing.<sup>35</sup>

- **De Minimis:** Ease of administration is important to reduce burden for recipients and agencies. Federal agencies may consider whether a general applicability public interest waiver should apply to infrastructure project purchases below a de minimis threshold. An agency may consider whether a public interest waiver should apply when necessary to ensure that recipients and Federal agencies make efficient use of limited resources, especially if the cost of processing the individualized waiver(s) would risk exceeding the value of the items waived. Agencies may consider adopting an agency-wide public interest waiver that sets a de minimis threshold, for example, of 5 percent of project costs up to a maximum of \$1,000,000.
- **Small Grants:** Agencies may wish to consider whether it is in the public interest to waive application of a Buy America preference to awards below the Simplified Acquisition Threshold. This type of waiver may be particularly relevant in the initial years after enactment of IJA, and may be phased out over time as agencies develop efficient waiver review capabilities.
- **Minor Components:** Agencies may wish to consider whether it is in the public interest to allow minor deviations for miscellaneous minor components within iron and steel products. A minor components waiver in the public interest may allow non-domestically produced miscellaneous minor components comprising no more than 5 percent of the total material cost of an otherwise domestically produced iron and steel product to be used. It would not be in the public interest to use a minor components waiver to exempt a whole product from the iron and steel requirements, or to allow the primary iron or steel components of the product to be produced other than domestically.
- **Adjustment Period:** Agencies should consider whether brief, time limited waivers to allow recipients and agencies to transition to new rules and processes may be in the public interest.
- **International Trade Obligations:** If a recipient is a State that has assumed procurement obligations pursuant to the Government Procurement Agreement or any other trade agreement, a waiver of a Made in America condition to ensure compliance with such obligations may be in the public interest.
- **Other Considerations:** A waiver may be in the public interest in one circumstance, but not in another, and considerations will depend upon the nature and amount of resources available to the recipient, the value of the items, goods, or materials in question, the potential domestic job impacts, and other policy considerations, including sustainability, equity, accessibility, performance standards, and the domestic content (if any) of and conditions under which the non-qualifying good was produced.

All proposed waivers citing the public interest as the statutory basis must include a detailed written statement, which shall address all appropriate factors, such as potential

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<sup>35</sup> The list is not exhaustive and no agency is required to issue the types of waivers noted as examples. As with other general applicability waivers, generally applicable public interest waivers must be reviewed at least every five years and more often as appropriate.

obligations under international agreements, justifying why the requested waiver is in the public interest.<sup>36</sup>

Before granting a waiver in the public interest, to the extent permitted by law, agencies shall assess whether a significant portion of any cost advantage of a foreign-sourced product is the result of the use of dumped steel, iron, or manufactured products or the use of injuriously subsidized steel, iron, or manufactured products.<sup>37</sup> Agencies may consult with the International Trade Administration (ITA) in making this assessment if the granting agency deems such consultation to be helpful. The agency shall integrate any findings from the assessment into its waiver determination as appropriate.<sup>38</sup> MIAO will work with ITA and agencies to develop standard processes to expedite this required assessment, such as by ensuring agencies know how to easily access lists of dumped or injuriously subsidized products.

*c. General Applicability Waivers*

The term “general applicability waiver” refers to a waiver that applies generally across multiple awards. A general applicability waiver can be “product-specific” (e.g., applies only to a product or category of products) or “non-product specific” (e.g., applies to all “manufactured products”).

General applicability waivers should be issued only when necessary to advance an agency’s missions and goals, consistent with IJJA, the Executive Order, and this guidance. For example, an agency might issue a general waiver for a product for which there are well-established domestic sourcing challenges. General applicability waivers will require appropriate justification from the Federal agency.

Federal agencies with one or more existing general applicability waivers, including public interest waivers, must review such waivers within five years of the date on which the waiver was issued. Agencies issuing new general applicability waivers must review such waivers at least every five years from the date of issuance. Agencies are encouraged to review general applicability waivers more frequently, when appropriate. In conducting a review of any general applicability waiver, the head of a Federal agency shall—

- (A) publish in the *Federal Register* a notice that—
  - (i) describes the justification for a general applicability waiver; and
  - (ii) requests public comments for a period of not less than 30 days on the continued need for a general applicability waiver; and
  
- (B) publish in the *Federal Register* a determination on whether to continue or discontinue the general applicability waiver, considering the comments received in response to the notice published under paragraph (A).<sup>39</sup>

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<sup>36</sup> IJJA, § 70937(c)(2)(C).

<sup>37</sup> Executive Order, § 5.

<sup>38</sup> Executive Order, § 5.

<sup>39</sup> IJJA, § 70914(d)(1) & (2).

For a period of five years beginning on the date of enactment of the Act, paragraphs (A) and (B) above shall not apply to any product-specific general applicability waiver that was issued more than 180 days before November 15, 2021.<sup>40</sup>

By no later than November 15, 2022, agencies with existing, non-product specific general applicability waivers that were issued more than five years before November 15, 2021 should promptly commence review of each such waiver by publishing a *Federal Register* notice as required in section 70914(d)(2)(A) of the IIJA. Should the review justify retaining the waiver, agencies should consider narrowing the waiver in a manner that would support supply chain resilience and boost incentives to manufacture key products domestically, as appropriate.

To ensure prompt commencement of projects funded by IIJA, MIAO plans to work with agencies to expedite consideration of general applicability waivers for products or categories of products for which domestic sourcing challenges have been well documented. Agencies should align such waivers with complementary policies, such as work to boost supply chain resiliency and domestic employment. General applicability waivers should include appropriate expiration dates designed to ensure that, once available, Buy America qualifying products receive appropriate consideration.

### **VIII. Preliminary Guidance for Construction Materials**

For construction materials, the Act requires that, not later than 180 days after November 15, 2021, OMB must issue standards that define the term “all manufacturing processes” in the case of construction materials. These standards must require that each manufacturing process required for the manufacture of the construction material and the inputs of the construction material occurs in the United States. They must also reflect efforts to maximize the direct and indirect jobs benefited or created in the production of the construction material.<sup>41</sup>

Although the deadline to issue such guidance has not yet passed, OMB is providing preliminary and non-binding guidance to assist agencies in determining which materials are construction materials so that agencies can begin applying Buy America requirements to those materials. This preliminary guidance addresses the requirements as set forth in section 70915(b) of the IIJA while providing sufficient time for OMB to receive additional stakeholder input.

The IIJA finds that “construction materials” includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives<sup>42</sup>—that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);

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<sup>40</sup> IIJA, § 70914(d)(3).

<sup>41</sup> IIJA, § 70915(b).

<sup>42</sup> IIJA, § 70917(c)(1).

- lumber; or
- drywall.<sup>43</sup>

To provide clarity to item, product, and material manufacturers and processors, we note that items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. For example, a plastic framed sliding window should be treated as a manufactured product while plate glass should be treated as a construction material.

Pending OMB's issuance of final standards on construction materials, and absent any existing applicable standard in law or regulation that meets or exceeds these preliminary standards, agencies should consider "all manufacturing processes" for construction materials to include at least the final manufacturing process and the immediately preceding manufacturing stage for the construction material. OMB is seeking additional stakeholder input before issuing further guidance identifying initial manufacturing processes for construction materials that should be considered as part of "all manufacturing processes."

Agencies should consult with MIAO, as needed, to ensure that any waiver issued for construction materials is explicitly targeted and time-limited, in order to send a clear market signal that additional standards for "all manufacturing processes" in the case of construction materials will be forthcoming.

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<sup>43</sup> See IIIA, § 70911(5).



## **Appendix I: Example of Award Term - Required Use of American Iron, Steel, Manufactured Products, and Construction Materials**

Where applicable, the Federal agency must include appropriate terms and conditions in all awards, in accordance with applicable legal requirements and its established procedures, in order to effectuate the requirements of the Act and this guidance. The following is sample language.

To achieve the greatest possible consistency across agencies and programs, agencies should send their proposed terms and conditions to MIAO for review prior to incorporating them into applicable awards. Agencies should begin including appropriate language in NOFOs published *before* May 14, 2022 to provide applicants fair notice of the Buy America conditions that will apply to funds obligated on or after that date.

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Recipients of an award of Federal financial assistance from a program for infrastructure are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:

- (1) all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- (2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
- (3) all construction materials<sup>44</sup> are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

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<sup>44</sup> Excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

### *Waivers*

When necessary, recipients may apply for, and the agency may grant, a waiver from these requirements. The agency should notify the recipient for information on the process for requesting a waiver from these requirements.

- (a) When the Federal agency has made a determination that one of the following exceptions applies, the awarding official may waive the application of the domestic content procurement preference in any case in which the agency determines that:
  - (1) applying the domestic content procurement preference would be inconsistent with the public interest;
  - (2) the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or
  - (3) the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

A request to waive the application of the domestic content procurement preference must be in writing. The agency will provide instructions on the format, contents, and supporting materials required for any waiver request. Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Made in America Office.

There may be instances where an award qualifies, in whole or in part, for an existing waiver described at [link to awarding agency web site with information on currently applicable general applicability waivers].

### *Definitions*<sup>45</sup>

“Construction materials” includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives<sup>46</sup>—that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

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<sup>45</sup> Federal agencies may choose to provide definitions on a public-facing website and reference that website in the terms and conditions, rather than including all definitions in the terms and conditions itself. If an agency chooses to do provide definitions on a public-facing website, it is not considered a deviation from the terms and conditions provided and does not need to be reviewed by OMB.

<sup>46</sup> IIIA, § 70917(c)(1).

“Domestic content procurement preference” means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced in the United States; or the construction materials used in the project are produced in the United States.

“Infrastructure” includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

“Project” means the construction, alteration, maintenance, or repair of infrastructure in the United States.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OCT 21 2022

THE ADMINISTRATOR

**DECISION MEMORANDUM**

**SUBJECT:** Public Interest: *De Minimis* General Applicability Waiver of Section 70914(a) of P.L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards and Procurements

**FROM:** Michael S. Regan

A handwritten signature in black ink that reads "Michael S. Regan".

Introduction

Congress passed, and the President signed in November 2021 the Infrastructure Investment and Jobs Act, which included the Build America, Buy America Act. This is a transformational opportunity to build a resilient supply chain and manufacturing base for critical products here in the United States that will catalyze new and long-term investment in good-paying American manufacturing jobs and businesses. Consistent with the policy direction of Executive Order 14005: Ensuring the Future is Made in All of America by All of America's Workers, section 70914 of the Infrastructure Investment and Jobs Act establishes governmentwide Buy America conditions on all federal financial assistance programs and the projects funded through federal financial assistance funded after May 14, 2022.

The U.S. Environmental Protection Agency remains committed to implementing Build America, Buy America to cultivate the domestic manufacturing base for a range of products. Products that qualify for a *de minimis* waiver cumulatively may comprise no more than a total of five percent of the total project cost. This waiver is not additive with the existing American Iron and Steel national *de minimis* waiver. The EPA's infrastructure programs vary widely from small community projects costing thousands of dollars up to large billion-dollar regional infrastructure projects. The EPA solicited public comment on including a dollar cap per project. The EPA received no public comments supporting including a cap. Based on an assessment of agency infrastructure projects, many larger projects in a variety of covered infrastructure programs have such significant material costs that a dollar cap would not provide the flexibility intended by the *de minimis* waiver. After consideration of the public comments received, the EPA is not including a dollar cap for its waiver.

Build America, Buy America *De Minimis* Waiver

The Office of Management and Budget's April 18, 2022, memorandum, "Initial Implementation Guidance on Application of Buy American Preference in Federal Financial Assistance Programs for Infrastructure" (M-22-11) encourages agencies to consider whether a general applicability public interest waiver should apply to infrastructure project purchases below a *de minimis* threshold to reduce the administrative burden for recipients and agencies. OMB directs agencies to ensure that recipients



and federal agencies make efficient use of limited resources, especially if the cost of processing the individualized waiver would risk exceeding the value of the items waived.

This waiver advances Build America, Buy America by reducing the administrative burden to potential assistance recipients where the costs of compliance could distract from the focus on higher value compliant items. Failure to provide recipients such flexibilities could delay the award for infrastructure projects as assistance recipients must exert considerable effort accounting for the sourcing for miscellaneous, low-cost items.

#### Anticipated Program Impacts Absent a Waiver

Build America, Buy America impacts more than 60 EPA programs. The agency is committed to robust implementation of the act's Buy American Preference in an efficient and effective manner. This waiver seeks to significantly reduce the administrative burden on recipients while exempting a small share (five percent or less) of the total project cost from the Buy American Preference requirement.

Infrastructure projects often contain a relatively small number of high-cost products incorporated into the projects. In solicitations for a project, these high-cost products are generally described in detail via project specific technical specifications. For these major products, recipients are generally familiar with the conditions of availability, the potential alternatives for each detailed specification, the approximate cost, and the country of manufacture of the available components.

Infrastructure projects also involve the use of potentially thousands of miscellaneous, generally low-cost products that are essential for construction and are incorporated into the physical structure of the project. For many of these miscellaneous products, the country of manufacture and the availability of alternatives are not always readily or reasonably identifiable prior to procurement in the normal course of business; for other miscellaneous products, the country of manufacture may be known but the miscellaneous character in conjunction with the low cost, individually or procured in bulk, mark them as potentially *de minimis* items.

Failure to grant such a waiver creates significant administrative burden for the EPA and recipients as both sides must negotiate such products on a project-by-project basis, which will increase the cost to the taxpayer, delay the award of assistance agreements and procurement, and has negligible relevance to the intent of Build American, Buy American. With application of this waiver, federally funded infrastructure projects would be aided in meeting the critical public health protection and environmental project purposes on time and on budget. By focusing the programs' attention on high-value domestic products (representing most of the federal infrastructure investment), the EPA will be well-positioned to catalyze resilient domestic supply chains and invest in good-paying American manufacturing jobs and businesses. Absent the waiver, critical public-health protection and environmental infrastructure projects could expend resources inefficiently, potentially failing to deliver on the critical goals of projects and the domestic preference requirements.

#### Assessment of Cost Advantage of a Foreign-Sourced Product

Under OMB Memorandum M-22-11, agencies are expected to assess "whether a significant portion of any cost advantage of a foreign-sourced product is the result of the use of dumped steel, iron or manufactured products or the use of injuriously subsidized steel, iron or manufactured products" as appropriate before granting a public interest waiver. The EPA's analysis has concluded that this

assessment is not applicable to this waiver, as this waiver allows only a small, *de minimis* value of products to be waived relative to the total cost of a project. The EPA will perform additional market research as it implements the Build America, Buy America requirements to better understand the market and to limit the use of waivers caused by dumping of foreign-sourced products.

### Public Notice

The EPA published July 27, 2022, a notice proposing to issue this waiver, and the comment period was open until August 15, 2022. The agency received 41 comments during the public comment period: one representing a federal agency; nine representing manufacturers and the manufacturing industry; 21 representing state agencies; three representing territories; and seven representing rural partnerships and water associations. Most comments were supportive of the waiver with many requesting a threshold higher than the proposed five percent, usually 10 to 15 percent. Of the few comments on a cap, some were opposed, and others supported a cap contingent on a threshold higher than the proposed five percent. Some commenters opposed the waiver because the waiver could reduce opportunities for American manufacturing. Other commenters requested that the Build America, Buy America *de minimis* waiver mirror the American Iron and Steel *de minimis* waiver.

The EPA received comments on the use of material cost as the calculation basis for the threshold versus using project costs. The EPA agrees that material costs are often built into contracts along with other costs, making it difficult to consistently determine an appropriate threshold for projects. Using project cost and not material cost will simplify the calculation and would alleviate burden and confusion for assistance recipients. Therefore, the EPA has changed the calculation basis from material cost to project cost.

The EPA also received many comments on the five percent threshold itself. No comments requested that the threshold be lowered, a few comments agreed with the EPA's threshold, and many requested that the threshold be increased (to up to 20 percent with most requesting an increase to 15 percent) or requested that the threshold be modified so the five percent limit would apply to each of the three subcategories (five percent for iron and steel, five percent for construction materials and five percent for manufactured products). With the cost calculation changing from material costs to project costs, this will functionally increase the amount of products that can be covered by this waiver for most projects. Therefore, after consideration of these comments, the EPA is finalizing the proposed five percent threshold.

The EPA received comments and questions on the examples provided as items that, dependent on the conditions and purpose of the project, may or may not be considered *de minimis*. The EPA's intention was to provide examples to assist programs; however, this created confusion that only certain items could be covered. The five percent threshold can be used for any products, independent on the purpose of the project. The EPA is removing the examples from the text of the final waiver to avoid confusion.

After reviewing these comments, the EPA concludes that the information provided to the agency generally supports a general applicability waiver. Products that qualify for a *de minimis* waiver cumulatively may comprise no more than a total of five percent of the total project cost.



### Waiver Decision

Section 70914(b)(1) of the Infrastructure Investment and Jobs Act authorizes the Administrator to waive the requirements of Build America, Buy America if implementation would be inconsistent with the public interest. Due to the critical need to reduce the administrative burden for recipients and agencies and to ensure recipients can effectively carry out the EPA funded activity in a timely manner, it is in the public interest to waive Build America, Buy America requirements for products used in and incorporated into a project that cumulatively comprise no more than five percent of the total project cost. This waiver is not additive with the existing American Iron and Steel national *de minimis* waiver. The EPA will review this waiver every five years after the date on which the waiver is issued.

If you have any questions concerning the contents of this memorandum, please contact Dan Coogan at [EPA\\_BABA\\_Waiver@epa.gov](mailto:EPA_BABA_Waiver@epa.gov).

# **BUILD AMERICA, BUY AMERICA (BABA) REQUIREMENTS CONTRACTOR CERTIFICATION**

## **LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH**

The Contractor acknowledges to and for the benefit of the **(INSERT Water System Name)** (“Owner”) and the Louisiana Department of Health’s Drinking Water Revolving Loan Fund (DWRLF) (the “Funding Authority”) that it understands the goods and services under the Executed Contract (“Agreement”) are being funded with federal monies and have statutory requirements commonly known as “Build America, Buy America;” that requires all of the iron and steel, manufactured products, and construction materials used in the project to be produced in the United States (“Build America, Buy America Requirements”) including iron and steel, manufactured products, and construction materials provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and Funding Authority that (a) the Contractor has reviewed and understands the Build America, Buy America Requirements, (b) all of the iron and steel, manufactured products, and construction materials used in the project will be and/or have been produced in the United States in a manner that complies with the Build America, Buy America Requirements, unless a waiver of the requirements is applicable, approved, and documented, (c) the Contractor is required to submit with every invoice a Build America, Buy America (BABA) Requirements Pay Request Certification that includes a list of the iron and steel products included in that invoice and supporting documentation (i.e. Manufacturer’s Certification) that clearly identifies that either these goods were produced in the United States or a waiver applies, and (d) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the Build America, Buy America Requirements, as may be requested by the Owner or the Funding Authority. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or Funding Authority to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Owner or Funding Authority resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the Funding Authority or any damages owed to the Funding Authority by the Owner). While the Contractor has no direct contractual privity with the Funding Authority, which is a lender to the Owner for the funding of its project, the Owner and the Contractor agree that the Funding Authority is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the Funding Authority.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT: \_\_\_\_\_

TITLE: \_\_\_\_\_

PROJECT/CONTRACT NUMBER and NAME: \_\_\_\_\_



# **BUILD AMERICA, BUY AMERICA (BABA) REQUIREMENTS** **PAY REQUEST CERTIFICATION**

**LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH**

**Project:** \_\_\_\_\_  
\_\_\_\_\_

**Contract:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_

**Pay Request/Invoice No.:** \_\_\_\_\_

The Contractor acknowledges to and for the benefit of the \_\_\_\_\_ (“Owner”) and the Louisiana Department of Health’s Drinking Water Revolving Loan Fund (DWRLF) (the “Funding Authority”) that it understands the goods and services under the Executed Contract (“Agreement”) are being funded with federal monies and have statutory requirements commonly known as “Build America, Buy America;” that requires all of the iron and steel, manufactured products, and construction materials used in the project to be produced in the United States (“Build America, Buy America Requirements”) including iron and steel, manufactured products, and construction materials provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and Funding Authority that (a) the Contractor has reviewed and understands the Build America, Buy America Requirements, (b) all of the iron and steel, manufactured products, and construction materials used in the project as part of the above identified invoice number have been produced in the United States in a manner that complies with the Build America, Buy America Requirements, unless and where a waiver of the requirements is applicable, approved, and documented, (c) the Contractor is required to submit with every invoice a list of the iron and steel products, manufactured products, and construction materials products included in that invoice and supporting documentation (i.e. Manufacturer’s Certification) that clearly identifies that either these goods were produced in the United States or a waiver applies, and (d) the Contractor will provide any further verified information, certification or assurance of compliance with this certification, or information necessary to support a waiver of the Build America, Buy America Requirements, as may be requested by the Owner or the Funding Authority. Notwithstanding any other provision of the Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or Funding Authority to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Owner or Funding Authority resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the Funding Authority or any damages owed to the Funding Authority by the Owner). While the Contractor has no direct contractual privity with the Funding Authority, which is a lender to the Owner for the funding of its project, the Owner and the Contractor agree that the Funding Authority is a third-party beneficiary and neither this paragraph (nor any other provision of the Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the Funding Authority.

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PRINT:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**LDH-DWRLF**  
**EXAMPLE BUILD AMERICA, BUY AMERICA ACT (BABA)**  
**MANUFACTURER CERTIFICATION LETTER**

The following information is provided as an example letter of a manufacturer's certification for BABA compliance. This letter must be provided on the manufacturing company's letterhead.

*Date*

*Company Name*

*Company Address*

*City, State Zip*

Subject: **Build America, Buy America Certification for Project (XXXXXXXXXX – must state the water system name and/or project/contract title specific enough and recognizable enough to easily associate it with this particular project)**

I, (*company representative*), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the Buy America, Build America (BABA) requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. *Xxxx*
2. *Xxxx*
3. *Xxxx*

Such process took place at the following location:

*[Redacted]*

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

*(Signed by company representative)*

*Drinking Water Revolving Loan Fund*  
**DAVIS BACON ACT WAGE DETERMINATION  
10-DAY CALL FORM**

**The Contract**

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Water System Name: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Contract No. and  
Name: \_\_\_\_\_

**Ten Day Call Information**

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Person Verifying the  
Wage Determination: \_\_\_\_\_  
Verification Method  
(Call, Check DOL  
Website, etc.): \_\_\_\_\_  
Date of Verification: \_\_\_\_\_  
Bid Opening Date: \_\_\_\_\_

**Wage Determination Verification**

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<p><b>A</b> _____ Type of work to be done</p> <p>_____</p> <p>Wage Determination that was made part of the original bid documents</p> <p>_____</p> <p>Current Determination based on DOL</p> <p>Action Taken: ___ None _____ Addendum</p>	<p><b>B</b> _____ Type of work to be done</p> <p>_____</p> <p>Wage Determination that was made part of the original bid documents</p> <p>_____</p> <p>Current Determination based on DOL</p> <p>Action Taken: ___ None _____ Addendum</p>
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Comments: \_\_\_\_\_

Signature: \_\_\_\_\_

## **DWRLF Wage Rate Requirements**

### **Wage Rate Requirements**

The recipient agrees to include in all agreements to provide assistance for any construction project carried out in whole or in part with such assistance made available by a drinking water revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12), a term and condition requiring compliance with the requirements of section 1450(e) of the Safe Drinking Water Act (42 U.S.C.300j-9(e)) in all procurement contracts and sub-grants, and require that loan recipients, procurement contractors and sub-grantees include such a term and condition in subcontracts and other lower tiered transactions. All contracts and subcontracts for any construction project carried out in whole or in part with assistance made available as stated herein shall insert in full in any contract in excess of \$2,000 the contract clauses as attached hereto entitled "Wage Rate Requirements Under The Clean Water Act, Section 513, and the Safe Drinking Water Act, Section 1450(e)." This term and condition applies to all agreements to provide assistance under the authorities referenced herein, whether in the form of a loan, bond purchase, grant, or any other vehicle to provide financing for a project, where such agreements are executed on or after October 30, 2009.

### **Preamble**

With respect to the DWSRF program, EPA provides capitalization grants to each State which in turn provides sub grants or loans to eligible entities within the State. Typically, the sub recipients are municipal or other local governmental entities that manage the funds. For these types of recipients, the provisions set forth under Roman numeral I, below, shall apply. Although EPA and the State remain responsible for ensuring sub recipients' compliance with the wage rate requirements set forth herein, those sub recipients shall have the primary responsibility to maintain payroll records as described in Section 3(ii)(A), below and for compliance as described in Section I-5.

Occasionally, the sub recipient may be a private for profit or not for profit entity. For these types of recipients, the provisions set forth in Roman Numeral II, below, shall apply. Although EPA and the State remain responsible for ensuring sub recipients' compliance with the wage rate requirements set forth herein, those sub recipients shall have the primary responsibility to maintain payroll records as described in Section II-3(ii)(A), below and for compliance as described in Section II-5.

## **I. Requirements Under Section 1452 (a)(5) of the Safe Drinking Water Act For Sub recipients That Are Governmental Entities:**

The following terms and conditions specify how recipients will assist EPA in meeting its Davis-Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance with respect to State recipients and sub recipients that are governmental entities. If a sub recipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a State recipient needs guidance, the recipient may contact EPA's Office of Grants and Debarment for guidance at [EPA Grants Info@epa.gov](mailto:EPA_Grants_Info@epa.gov). The recipient or sub recipient may also obtain additional guidance from the U.S. Department of Labors (DOL) website at <http://www.dol.gov/whd/>

### **1. Applicability of the DB prevailing wage requirements.**

DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the sub recipient must discuss the situation with the recipient State before authorizing work on that site.

### **2. Obtaining Wage Determinations.**

(a) Sub recipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the sub recipient shall monitor <https://sam.gov/> weekly to ensure that the wage determination contained in the solicitation remains current. The sub recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the sub recipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the sub recipient.
- (ii) If the sub recipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes

to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the sub recipient, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The sub recipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the sub recipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the sub recipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.

(c) Sub recipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a sub recipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the sub recipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the sub recipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The sub recipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### **3. Contract and Subcontract provisions.**

(a) The Recipient shall insure that the sub recipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project carried out in whole or in part with assistance made available by the DWSRF, and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the Safe Drinking Water Act, Section 1452 (a)(5), the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates

not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the DB Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the DB poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Sub recipients may obtain wage determinations from the U.S. Department of Labor's website, <https://sam.gov/>.

(ii)(A) The sub recipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sub recipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request,

including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) and supporting materials to [WHD-CBACONFORMANCE\\_INCOMING@dol.gov](mailto:WHD-CBACONFORMANCE_INCOMING@dol.gov) and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the sub recipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), documentation of the action taken and request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) which indicates the State award official's disagreement and supporting materials to [WHD-CBACONFORMANCE\\_INCOMING@dol.gov](mailto:WHD-CBACONFORMANCE_INCOMING@dol.gov) and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the DB Act have been met. The Secretary of Labor may require the contractor to set aside assets in a separate account for the meeting of obligations under the plan or program.

(2) Withholding. The sub recipient(s), shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor,



withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to DB prevailing wage requirements, which is held by the same prime contractor, or any other federally-assisted contract subject to DB prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

### (3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DB Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the sub recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the sub recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the

most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), **except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number)**. The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the sub recipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sub recipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for

submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the EPA or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### (4) Apprentices and trainees

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of

progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with DB and Related Act requirements. All rulings and interpretations of the DB and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and sub recipient(s), State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### **4. Contract Provision for Contracts in Excess of \$100,000.**

(a) Contract Work Hours and Safety Standards Act. The sub recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the

overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The sub recipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the

other statutes cited in 29 CFR 5.1, the Sub recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Sub recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of LDH, EPA, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## **5. Compliance Verification**

(a) The sub recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(3), all interviews must be conducted in confidence. The sub recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The sub recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Sub recipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Sub recipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c) The sub recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The sub recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the sub recipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Sub recipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the sub recipient shall verify evidence of fringe benefit plans and payments there

under by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The sub recipient shall periodically review contractor's and subcontractor's use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Sub recipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.



## **II. Requirements Under The Safe Drinking Water Act, Section 1452 (a)(5) For Sub recipients That Are Not Governmental Entities:**

The following terms and conditions specify how recipients will assist EPA in meeting its DB responsibilities when DB applies to EPA awards of financial assistance under the Safe Drinking Water Act, Section 1452(a)(5) with respect to sub recipients that are not governmental entities. If a sub recipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient for guidance. If a State recipient needs guidance, the recipient may contact EPA's Office of Grants and Debarment for guidance at [EPA Grants info@epa.gov](mailto:EPA_Grants_info@epa.gov). The recipient or sub recipient may also obtain additional guidance from the U.S. Department of Labors (DOL) website at <http://www.dol.gov/whd/>

**Under these terms and conditions, the sub recipient must submit its proposed DB wage determinations to the State recipient for approval prior to including the wage determination in any solicitation, contract task orders, work assignments, or similar instruments to existing contractors.**

### **1. Applicability of the Davis- Bacon (DB) prevailing wage requirements.**

Under the Safe Drinking Water Act, Section 1452(a)(5), DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the sub recipient must discuss the situation with the recipient State before authorizing work on that site.

### **2. Obtaining Wage Determinations.**

(a) Sub recipients must obtain proposed wage determinations for specific localities at <https://sam.gov/>. After the Sub recipient obtains its proposed wage determination, it must submit the wage determination to their **LA DWRLF Project Engineer, 225-342-7499**, for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar instruments to existing contractors (ordering instruments unless subsequently directed otherwise by the State recipient Award Official.)

(b) Sub recipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the sub recipient shall monitor <https://sam.gov/> on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The sub recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the sub recipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the sub recipient.
- (ii) If the sub recipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the sub recipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The sub recipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(c) If the sub recipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the sub recipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.

(d) Sub recipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(e) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a sub recipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the sub recipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the sub recipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The sub recipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### **3. Contract and Subcontract provisions.**

(a) The Recipient shall insure that the sub recipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction,

alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project carried out in whole or in part with assistance made available by the DWSRF, and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the Safe Drinking Water Act, Section 1452(a)(5), the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3) ), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the DB Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Sub recipients may obtain wage determinations from the U.S. Department of Labor's web site, <https://sam.gov/>.

(ii)(A) The sub recipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall

approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sub recipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient(s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) and supporting materials to [WHD-CBACONFORMANCE\\_INCOMING@dol.gov](mailto:WHD-CBACONFORMANCE_INCOMING@dol.gov) and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the and the sub recipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient(s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) which indicates the State award official's disagreement and supporting materials to [WHD-CBACONFORMANCE\\_INCOMING@dol.gov](mailto:WHD-CBACONFORMANCE_INCOMING@dol.gov) and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the DB Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The sub recipient(s) shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DB Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program

has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the sub recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the sub recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), **except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number).** The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the sub recipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sub recipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be

eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not



less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with DB and Related Act requirements. All rulings and interpretations of the DB and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and Sub recipient(s), State, EPA, DOL, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a

person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### **4. Contract Provision for Contracts in Excess of \$100,000.**

(a) Contract Work Hours and Safety Standards Act. The sub recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The sub recipient shall upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and

Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(c) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Sub recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Sub recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of LDH, EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## **5. Compliance Verification**

(a) The sub recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(3), all interviews must be conducted in confidence. The sub recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The sub recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Sub recipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Sub recipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c). The sub recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The sub recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the sub recipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Sub recipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB . In addition, during the examinations the sub recipient shall verify evidence of fringe benefit plans and payments there under by contractors and subcontractors who claim credit for fringe benefit contributions.

(d). The sub recipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Sub recipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.

# DAVIS-BACON AND RELATED ACTS PAYROLL CERTIFICATION

LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH

**NOTE:** This certification is required for all projects receiving funding from DWRLF that must comply with Davis-Bacon requirements as indicated in the loan closing documents. All Payment Requests seeking reimbursement for construction costs must include this certification.

**Name of Water System:** \_\_\_\_\_

**Name of Project:** \_\_\_\_\_ **DWRLF Project No.** \_\_\_\_\_

**Contractor / Subcontractor:** \_\_\_\_\_

Weekly Payroll Numbers and Dates Covered by this Certification:

Payroll No.: _____	From: _____	To: _____	Comments: _____
Payroll No.: _____	From: _____	To: _____	Comments: _____
Payroll No.: _____	From: _____	To: _____	Comments: _____
Payroll No.: _____	From: _____	To: _____	Comments: _____
Payroll No.: _____	From: _____	To: _____	Comments: _____
Payroll No.: _____	From: _____	To: _____	Comments: _____
Payroll No.: _____	From: _____	To: _____	Comments: _____

**Interview Verifications:**

Recipients shall periodically conduct employee interviews in accordance with the 'Wage Rate Requirements' for this project. **A minimum of 1 set of Initial and 1 set of Final Interviews are required**. If and when it is deemed necessary to conduct additional interviews to ensure that contractors and their sub-contractors are complying with the prevailing wage requirements, additional interviews may be required by the DWRLF Project Engineer. An interview form (Standard Form 1445 or equivalent) must be completed with every interview and kept on file.

Initial Interview Date: \_\_\_\_\_ Interview Date: \_\_\_\_\_ Interview Date: \_\_\_\_\_  
Interview Date: \_\_\_\_\_ Interview Date: \_\_\_\_\_ Final Interview Date: \_\_\_\_\_

**CERTIFICATION**

I certify to the best of my knowledge and belief that the above referenced project complies with the Davis-Bacon and Related Acts requirements as indicated in the loan closing documents and that all laborers and mechanics employed by contractors and subcontractors during the above referenced period were paid wages at rates not less than those listed on the prevailing wage rate contained in the contract documents and that all applicable provisions of the Davis-Bacon and Related Acts have been met.

<u>Name of Certifying Official:</u>		<u>Title of Person Certifying:</u>	
<u>Signature:</u>		<u>Phone Number:</u>	<u>Date Signed:</u>

*Payrolls and basic records must be maintained by the contractor for three years from project completion.*

[Code of Federal Regulations]  
[Title 29 Volume 1]  
[Revised as of July 1, 2008]  
From the U.S. Government Printing Office via GPO Access  
[CITE: 29CFR5.5]

[Page 115-121]

TITLE 29--LABOR

PART 5 LABOR STANDARDS PROVISIONS APPLICABLE TO CONTRACTS COVERING  
FEDERALLY FINANCED AND ASSISTED CONSTRUCTION (ALSO LABOR STANDARDS PROVISIONS  
APPLICABLE TO NONCONSTRUCTION CONTRACTS SUBJECT TO THE CONTRACT WORK HOURS AND  
SAFETY STANDARDS ACT)

Subpart A - Davis-Bacon and Related Acts Provisions and Procedures

Sec. 5.5 Contract provisions and related matters.

(a) The Louisiana Department of Health requires the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in Sec. 5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, Provided, That such modifications are first approved by the Department of Labor):

(1) Minimum wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or

mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The (write in name of the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including

apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the Louisiana Department of Health may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall Maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Louisiana Department of Health if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Louisiana Department of Health. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under Sec. 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under Sec. 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable



wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the ``Statement of Compliance'' required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Louisiana Department of Health or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Louisiana Department of Health may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Louisiana Department of Health may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility. (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded

Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. The Assistant Secretary, or his duly authorized representative, of the Louisiana Department of Health shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec. 5.1, the Assistant Secretary, or his duly

authorized representative, of the Louisiana Department of Health shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Assistant Secretary, or his duly authorized representative, of the Louisiana Department of Health shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Louisiana Department of Health and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

**SECTION 01 200**  
**SPECIAL PROVISIONS**

**PART I      SPECIAL PROVISIONS**

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SECTION 3.08	Removal of ADA-Accessible Ramps, Curb and Gutter, and Concrete Sidewalk at intersections including saw cutting
SECTION 3.09	ADA-Accessible Ramps, Curb and Gutter, and Concrete Sidewalk at intersections
SECTION 3.10	Driveways and Sidewalks (Special Finish)
SECTION 3.11	Sidewalk Transition Adjacent to ADA-Accessible Curb Ramp Areas
SECTION 3.12	ADA-Accessible Curb Ramp Retrofit
SECTION 3.13	Concrete Pavement (8" Thick)
SECTION 3.14	Root Pruning, Tree Protection, Landscaping, and Sidewalk Gravel Bed
SECTION 3.15	Granular Material and Fill Material
SECTION 3.16	Catch Basin and Manhole Repairs and Vertical Adjustments
SECTION 3.17	Drain Line Repairs / Replacement
SECTION 3.18	Timber Curb
SECTION 3.19	Type-A Dead End Installation
SECTION 3.20	Concrete Barrier or Mountable Curb with Laying Strip
SECTION 3.23	Non-Standard Water Point Repair Items

SECTION 3.24	Well Point System
SECTION 3.25	Pre and Post Rehabilitation CCTV Inspection and Cleaning Drain Structure(s)
SECTION 3.26	Waterline Pipe Bursting
SECTION 3.27	Non-Standard Bid Items



## **PART I - SPECIAL PROVISIONS**

### **SECTION 1.01 - GENERAL SPECIFICATIONS AND INTENT OF CONTRACT**

A. The General Specifications entitled, "General Specifications for Street Paving," the City of New Orleans, State of Louisiana, 2015 Edition (adopted 11/5/2015), shall be the General Specifications for this Contract and shall govern except as otherwise revised or supplemented by the provisions contained in these Special Specifications. The City Standard Drawings shall apply except as revised or supplemented by the project specific Construction Plans. In the event of discrepancy or conflict in provisions of the various contract documents, precedence shall be given to the provisions as contained in the document which appears first in the following list: Proposal, Construction Specifications, Construction Plans, General Specifications and Standard Plans for Street Paving, Sewerage and Water Board General Specifications and Standard Drawings, 2006 Edition LaDOTD Standard Specifications for Roads and Bridges. In the event of discrepancy or conflict in provisions of these Construction Specifications then precedence shall be given to the requirements of the Proposal, then to the Special Items.

B. The Sewerage and Water Board of New Orleans General Specifications, General Notes (DWG. NO. 7260-S, 7260-W, and 7260-D) and Standard Drawings, shall govern for the construction of all sewer, water, and drainage systems except as otherwise approved by the properly authorized officer of the Sewerage and Water Board. All sewer, water, and drainage work when complete, must be inspected and accepted by the Sewerage and Water Board of New Orleans before final payment can be approved.

C. The intent of the contract is to provide performance of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, project specifications and terms of the contract.

D. When an item in the proposal and contract contains a choice to be made by the Contractor and of the type material to be furnished, the Contractor, before the work is initiated, shall indicate his choice in accordance with the specifications for that item. Such notification shall be submitted to the Director in writing.

E. Payment for all bid items shall include all incidental materials, labor, supervision, and equipment required for installation in place according to the plans and specifications or as directed by the Director.

F. There shall be no direct pay for any work that is not listed in the bid proposal but is required to complete the construction of this project in accordance with the project plans and specifications. All costs thereof shall be included in the bid price of other items.

G. Prior to bidding, the Contractor is to examine the contract documents and visit the site to determine the extent of the work. Should the Contractor have any doubts or questions regarding Pay Items, he should, before submitting his bid, contact the Department of Finance, Purchasing Bureau.

H. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used and interpretation of these Specifications shall be made upon that basis.

I. The Director reserves the right to accept or reject any and all bids. The Director reserves the

right to reduce, delete or increase the quantity of any item in the proposal.

J. Section C121.01 of the General Specifications for Street Paving, 2015 Edition shall be amended to include the following language:

“The contractor shall not sublet any portion of the contract, excluding material, without the prior written consent and approval of the Director, including work sublet to an authorized Disadvantaged Business Enterprise. If such consent is given, the contractor will be permitted to sublet a portion of the work but shall perform with the contractor’s own organization work amounting to at least 50 percent of the total contract cost.

A subcontractor shall not further subcontract to a third party any portion of this authorized work, excluding material, without written consent, including work sublet to an authorized Disadvantaged Business Enterprise.”

K. Section C135 Changes in the Work of the DPW 2015 General Specifications For Street Paving (2015 edition) is hereby deleted in its entirety and replaced with the following:

The Director shall have the right to make alterations in the line, grade, plan, form, or dimensions of the work herein contemplated, either before or after the commencement of the work and without notice to the sureties. If such alterations diminish the quantity of work to be done, they shall not constitute a claim for damages for anticipated profits for the work deleted.

L. Louisiana Contractor’s License(s) is a requirement for this contract. The bidder shall include in the bid the applied current license(s) number(s) for the following project classification(s): Highways, street, and bridges, and Municipal and Public Works Construction. Note: When the bidder submits its bid package via SEALED ENVELOPE, said envelope must bear the Project Description AND the bidder’s Louisiana Contractor’s License Number(s) for the project classification(s).

**SECTION 1.02 - SCOPE OF WORK**

- A. It is the intent of this project to inspect and replace lead service lines (LSL) for existing water house connections in the public right of way from water main to meter.
- B. Removal and reconstruction work shall be accomplished in accordance with the construction documents and shall include but is not limited to the following:
  - 1. Inspecting existing water house connection at specified locations for lead.
  - 2. If lead is found, the resident is to be issued a SWBNO-approved written notification prior to performing the LSL replacement.
  - 3. Removing and replacing existing LSL at specified locations.
  - 4. Providing SWBNO-approved written notification of LSL replacement completion to resident.
- C. The Director reserves the right to reduce, delete or increase the quantity of any item in the proposal.

**.SECTION 1.03 - SPECIAL PROJECT REQUIREMENTS**

A. All utility frames, covers, and boxes shall be tilted to generally conform to the slope of the ramp or walk. Where frames, etc. fall at the edge of a ramp or slope, adjust the tilt halfway between ramp

slope and original elevation and warp the surface of ramp to blend into the edge of utility frames. Covers and boxes are to be adjusted by the Contractor. Private utility frames, covers and boxes are to be adjusted by the respective private utility company.

B. Temporary Barricades and Sidewalks: The Contractor shall provide and maintain construction fences, barricades, tree protection fencing, warning lights and temporary sidewalks as required by the Director or other authorities in approved locations affording complete protection to the public and providing security to the premises during the construction period. The Contractor shall provide all necessary items to insure pedestrian access to properties during construction. When required, flashing lights shall be installed at required locations.

C. Compliances: The Contractor shall comply with safety standards and governing regulations for cleaning operations. Waste materials shall not be burned at the site. Debris or excess materials shall not be buried on the Owner's property. Volatile or other harmful or dangerous materials shall not be discharged into drainage systems. The Contractor shall remove waste materials from the site and dispose of such waste in a lawful manner.

D. Salvageable Materials: Before the Contractor shall remove any items from the site, the Owner reserves the right to retain in his possession any demolished items that the Owner deems salvageable. All other items, after review by Owner, may be salvaged by the Contractor. All salvage materials as determined by the Director shall be delivered at the Contractor's expense to the related locations listed below and must provide forty-eight (48) hour notice to these locations before delivering the salvaged material.

1. Materials such as stone curbs, cobble stone, etc. to the Public Works/Maintenance yard at 838 South Genois Street.
2. Materials such as Traffic Control devices (signs and signals) to the DPW sign shop at 2700 Lafitte St.
3. Materials such as CB, MH frames, covers, hydrants, valves, etc. to the S&WB Central Yard at 2900 Peoples Ave.
4. Materials such as tree grates to the Department of Parks & Parkway Nursery at 2829 Gentilly Blvd.
5. Recycled asphalt product

E. The Contractor shall remove existing sidewalks, driveways, and pavement to full depth in areas shown on drawings, or as directed by project engineer, and shall take care not to damage existing pavement and existing curbing that is to remain. The use of "STOMPERS" and similar gravity equipment is prohibited in order to preserve the structural integrity of the adjacent buildings and adjoining property. All excavation is to be done from the street.

F. The Contractor shall be required to protect all adjacent properties, buildings, walls, fences, steps, etc., from damage due to demolition, removal, and construction of items required by the Contract Documents. Removal of material adjacent to adjoining structures should be done in such a manner so as not to cause damage by direct blows, vibrations, or other methods of demolition or construction. The Contractor shall promptly repair damages caused to adjacent facilities by demolition and construction operations at no cost to the property Owner or City.

G. The Contractor shall clean adjacent structures and improvements of dust, dirt and debris caused by demolition and construction operations, as directed by the Director or governing authorities. The Contractor shall return adjacent areas to condition existing prior to the start of the work.

H. The Contractor shall, before removing any signpost, etc., coordinate such removal with all of the appropriate City agencies and companies involved. Existing signposts, light standards, and all other items penetrating the sidewalk shall be straightened and reset in accordance with the Director's requirements, at no direct payment. All traffic control devices and their associated hardware (sign, signal, conduit, and marking) removed or damaged during execution of this contract, other than as provided for in this contract, shall be replaced by the Contractor at no cost to the City.

I. No sign, or signal shall be removed without the approval of the Director. The Contractor accepts all liabilities during the time of removal. Contractor will notify the DPW Traffic Engineer in writing when controls are removed and reinstalled. All signs, signals and markings removed during construction, shall be restored and in place prior to the final inspection.

J. It shall be the responsibility of the Contractor to maintain all public roadways, sidewalks, driveways, etc. in a clean condition during the construction project. All mud, trash, debris, etc. deposited on said areas by the Contractor shall be removed daily, before the end of work or more frequently, as necessary to maintain a clean condition. The Contractor shall return adjacent areas to condition existing prior to the start of the work.

K. The Contractor shall ensure that mail and trash pickup services can be provided on a continuous basis during construction of the project. If necessary, the Contractor shall relocate or provide curb side mailboxes for use during the construction period. No direct payment will be made for this work. Any costs incurred by this work will be included in project bid items.

L. For daily work on projects the City and/or RoadworkNOLA shall provide the Contractor with a project specific "We Are Working" notification template that shall include the start and end date, not exceeding a thirty (30) day duration, and detailed scope of work to be performed. New notifications shall be distributed if the end date exceeds thirty (30) days from the time of distribution.

M. The Contractor may be allowed to work on the weekend but shall first request permission from the City no later than seventy-two (72) hours prior to beginning that work. Notification flyers, provided by the City and/or RoadworkNOLA, must be distributed at least forty-eight (48) hours before any weekend work begins in an area.

N. The Contractor shall notify the RoadworkNOLA office at least seventy-two (72) hours for all water valve closures. Water valve closures for businesses, schools/colleges/universities, and medical facilities that require specialized advanced coordination must be provided one week prior. Notification flyers, provided by the City and/or RoadworkNOLA, must be distributed at least forty-eight (48) hours before the valve closures.

O. The Louisiana Department of Health and Hospitals requires at least twenty-four (24) notification of all test valve closures. Notification flyers, provided by the City and/or RoadworkNOLA, must be distributed at least twenty-four (24) hours before the valve closures. Test valve closures for businesses, schools/colleges/universities, and medical facilities that require specialized advanced coordination must be provided 72 hours in advance.

P. The Contractor must obtain approval from the City and/or RoadworkNOLA prior to distribution of notifications and is responsible for distributing all notifications, as required above. Failure to properly notify, based on these requirements, will result in a stop work order issued.

Q. It shall be the responsibility of the Contractor to distribute and obtain all Construction Authorization forms during the construction project. If necessary, a Construction Authorization form will be provided to the Contractor by the City. The Construction Authorization form is to be signed by the homeowner and a witness. All signed Construction Authorization forms are to be furnished to the Director prior to any work on the property listed on the Construction Authorization form. The Contractor shall return all disturbed areas to the condition existing prior to the start of the work.

R. The Contractor shall contact all utility companies prior to starting work to verify utility locations, depths of lines, etc., prior to starting demolition. Care should be taken in excavation around all utility lines. Utility service shall be maintained at all times for adjacent property owners, etc.

S. **UTILITY SERVICES:** Maintain existing utilities, keep in service, and protect against damage.

1. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to the governing authorities with no direct payment.

2. Note: Locations of existing utilities shown on the drawings are approximate. The Contractor shall verify their locations in the field with the appropriate agency in order to avoid conflicts and damage to utilities. Should damage occur to any existing utility lines or equipment, the Contractor shall be responsible for all cost repairs or replacements.

#### **SECTION 1.04 - INTERPRETATION OF DOCUMENTS**

No oral interpretation will be made to any bidder as to the meaning of any of the Contract Documents which in effect would modify any of the provisions of the same. Every request for an interpretation of the Documents shall be made in writing and delivered to the Director, at least seven (7) days (excluding weekends and holidays) before the time fixed for opening of bids. Any addenda shall be issued by the Director a minimum of 72 hours (excluding weekends and holidays) in advance of the time fixed for opening of bids. All bidders are requested to direct all questions about the contract documents promptly to the Director.

#### **SECTION 1.05 - SPECIAL SAFETY PRECAUTIONS**

In addition to the requirements of the General Specifications, it shall be the Contractor's responsibility to verify with the utility owners (electric, gas, telephone, communications, cable, etc., and New Orleans Sewerage and Water Board) having facilities within the project area, that the use of the Contractor's equipment (weights, configurations, characteristics, etc. provided by the Contractor) within the project area will not adversely affect their facilities.

#### **SECTION 1.06 - SAFETY AND HEALTH REGULATIONS**

The Code of Federal Regulations, Title 29, Occupational Safety and Health Administration (OSHA) shall apply. Safety and Health Provisions of the State of Louisiana shall apply where more stringent and where not covered by OSHA. The Contractor shall notify the Director within 24 hours of any reportable injury.

## **SECTION 1.07 - SAFETY PROTECTION & SECURITY**

The Contractor shall be responsible for initiating, providing, maintaining, and supervising all safety precautions and programs in connection with the work. He shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

- a. All Employees on the work and other persons who may be affected thereby,
- b. All the work and all materials or equipment to be incorporated herein, whether in storage on or off the site, and
- c. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, drives, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. He shall erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for its safety and protection. He shall notify owners of adjacent utilities when prosecution of the work may affect them.

The Contractor shall develop and provide an effective safety and health plan for inspection and training required and communicates the work practices to be applied to the work site(s). The Contractor must develop and implement a comprehensive health and safety plan for his or her employees, which covers all aspects of onsite construction operations and activities associated with the contract. This plan must comply with all applicable health and safety regulations and any project-specific requirements.

The Contractor must provide a copy of this plan to the Department of Public Works prior to issue of the NTP. Acceptance of the Contractor's health and safety plan only signifies that the plan generally conforms to the requirements of the contract; it does not relieve the Contractor of the responsibility for providing employees with a safe and healthful work environment.

The Control measures outlined in the site-specific safety plan, provides each worker assigned to the job the opportunity to complete his/her task safely. Summary of this document should include but not limited to the following:

Description	Summary	Reference
Contractor Name	Self-Explanatory	29 CFR 1910-OSHA General Industry Safety and Health
Contract No.	Self-Explanatory	
Project Name	Self-Explanatory	
Responsibility and lines of Authority	Include the identification and job responsibilities of personnel responsible for safety and the lines of authority for each level of responsibilities.	



Responsible Member (Competent Person)	Designated by employer to identify hazards that are dangerous to employees	29 CFR 1926.32 (f) Section 01 200 Special Provisions, Section 1.07
General safety and health provisions	List the steps to be taken to control the hazards	29 CFR 1926.20
Safety training and education	All employees shall be trained in the recognition and avoidance of unsafe conditions, standards, to control or eliminate any hazards or other exposure	29 CFR 1926.21(B)(2)
Housekeeping	Work areas, walkway clear of debris; garbage and flammable /hazardous waste disposed, frequently and regularly	29 CFR 1926.25
Illumination	Construction areas, roadways, trenches, ditches, and storage areas where work is in progress shall be lighted with either natural or artificial illumination	29 CFR 1926.26
Personal protective equipment	Employers are to ensure all personnel wear of protective equipment in all operations where there is an exposure to hazardous conditions	29 CFR 1926.28
Site Inspection	Designated person to make frequent and regular documented inspections of the job site/sites, materials, and equipment. Provide proof of inspector's qualifications and or training certificates	29 CFR 1926.20(b)(3)
Lockout/tagout	Procedures established for unsafe equipment identified or made inoperable by tagging, locking, or removing	29 CFR 1926.20(b)(1)&(b)(2)

Representatives of the Contractor shall meet with the DPW and Engineers representative prior to the start of construction for the purpose of reviewing safety requirements and discussing implementation of all health and safety provisions pertinent to the work under the assigned contract.

The representative will review the Contractor's site-specific safety and health plan with the Contractor as well as review all required safety data sheets (SDS) submitted for proposed products to be used by the Contractor. Due to the nature of the project/contract, the Contractor may be required to provide additional written comprehensive safety and health plans for the specific contract to include but not limited to the following:

Confined Space	Entry into any Manholes, Sewer, and Storm drains must be cleared for entry.	29 CFR 1910.146
Excavation and Shoring	Safe access and egress to all excavations, including ladders, steps, ramps, or other safe means of exit for employees working in trench excavations 4 feet (1.22 meters) or deeper.	29 CFR 1926 Subpart P
Lift Plan	Jobsite lifting with hydraulic excavators and backhoes is routine and lift capacity with rigging of each lift must be established.	29 CFR 1926.252 29 CFR 1926.601 29 CFR 1926.1400

Review and Acceptance of the Contractor’s health and safety plan only signifies that the plan generally conforms to the requirements of the contract; it does not relieve the contractor of the responsibility for providing employees with a safe and healthful work environment.

The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Director for approval.

It shall be the Contractor’s responsibility to maintain safety in the construction and maintenance zones within the project’s vicinity. If the Contractor hires law enforcement during the project’s duration, it shall be funded as an element in the Contractors Indirect Cost buildup presented at time of bid.

All damage, injury or loss to any property referred to in paragraphs b and c caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor at no direct payment. The Contractor's duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed and the Director has issued the Notice of Project Acceptance.

In emergencies affecting the safety of persons or the work or property at the site or adjacent thereto, the Contractor without special instructions or authorization from the Director, is obligated to act, at his discretion, to prevent threatened damage, injury, or loss.

The Contractor must protect and support all water, sewer, drain, and gas pipes or other conduits and buildings, walls, fences, or other properties which are liable to be damaged during the execution of his work. He shall take all reasonable and proper precautions to protect persons, animals, and vehicles of the public from injury, and shall erect and maintain a fence or railing around all excavation and place a sufficient number of warning lights about the work and keep them burning from twilight until sunrise and shall employ one or more watchmen as an additional security. He must, as far as practicable and consistent with good construction, permit access to private and public property and leave fire hydrants and catch basins free from encumbrances. He must restore, at his own expense, all injured property caused by any act of omission on his part, or on the part of his agent, including but not limited to



sidewalks, curbing, pipes, conduits, sewers and other public or private property, to a condition as good as it was when he entered upon the work.

In case of failure on the part of the Contractor to restore such property or make good such damage, the City may upon forty-eight (48) hours' notice proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof, will be deducted from any monies due, or which may become due, under this contract.

Safety is the responsibility of the Contractor. There will be no direct payment for erecting and maintaining a fence or railing around excavations, placing warning lights and providing watchmen and supporting and protecting utilities as prescribed herein and the cost thereof shall be included in the prices bid for pay items in the Contract. There will be no direct payment for providing and supervising all safety precautions and programs in connection with the work and the cost thereof shall be included in the prices bid for pay items in the contract.

### **SECTION 1.08 - COORDINATION WITH UTILITY COMPANIES**

A. All utility companies, including the Sewerage and Water Board, shall be contacted three working days prior to starting work to verify utility locations, depth of lines, etc., prior to starting demolition.

B. Contractor is responsible for contacting all utility companies so the utility companies can coordinate their efforts to move into the area to make whatever revisions they have to make to their utility installation.

C. Care shall be taken in excavation around all utility lines. Utility service shall be maintained at all times for adjacent property owners.

D. The Contractor shall notify the electric, gas, telephone, communications, and cable utility companies, utility owners, etc., three working days in advance of digging near or across their conduits or buried cables.

E. The Sewerage and Water Board must be notified three working days in advance of laying sewer and water lines called for in this contract.

F. Damage that may occur to any utility shall be repaired and paid for by the Contractor, except as noted to be paid for as a Bid Item.

G. The Contractor shall notify Entergy, S&WB and all other utility companies before any demolition takes place. The utility companies and the Contractor's representative should open all covers in the area and inspect and note any damage to frames, lines, manhole walls, etc. Any additional damage that occurs during demolition shall be repaired at the Contractor's expense. The utility companies have the option of repairing items and back charge the Contractor for such repairs.

H. UTILITY SERVICE: Maintain existing utilities, keep in service, and protect against damage during demolition operations.

Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing

utilities, as acceptable to the governing authorities.

The Contractor is hereby cautioned that many of the underground utility pipes, lines, conduits, cables, etc., are located immediately below the existing grade. Location and elevation of all utility lines have been established based on information furnished to the Engineers by the respective utility companies. However, location and depth of utility lines may vary from those shown on the Plans and Profiles.

The Contractor shall be required to provide property owners a minimum forty-eight (48) hours advanced notice for any foreseen or planned interruption of utility service(s).

### **SECTION 1.09 - COOPERATION WITH UTILITIES**

A. The Contractor shall cooperate with officials of utility companies to avoid delays in completion of work due to non-removal or non-adjustment of utilities.

B. Some utility facilities will be removed, relocated, or adjusted in accordance with agreements between the City and utility companies. Such work may be underway concurrently with the Contractor's work and within construction limits covered by this contract.

C. Contractor shall consider in his bid all permanent and temporary utilities lines and appurtenances in their present or relocated positions and that no additional compensation will be allowed for delays, inconvenience or damage sustained by him due to interference from the said utility lines and appurtenances or the operation of moving them.

### **SECTION 1.10 - ABOVE GROUND UTILITIES**

A. The Contractor shall exercise due care and caution to prevent damage to Fire Hydrants, Traffic Lights, Street Light Standards, Parking Meters, Utility Poles, Guy Poles, etc., whenever it is necessary to remove any type of pavement around such items. The Contractor shall repair and/or replace any such item damaged by his operations to the satisfaction of the utility's owner.

B. It shall be the responsibility of the Contractor to notify the appropriate owners of such facilities in the way of construction so that they can have representatives present, if they so desire, when the Contractor is performing such work around their facilities.

### **SECTION 1.11 - EXISTING UNDERGROUND AND OTHER INSTALLATIONS**

Existing underground installations are indicated on the drawings only to the extent such information was made available to or discovered by Engineer in preparing the drawings. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness thereof is expressly disclaimed.

The Contractor shall be responsible for the preservation of all public and private property, monuments, highway signs, telephone lines, other utilities, etc., along and adjacent to the Work; shall use every precaution necessary to prevent damage to pipes, conduits, and other underground structures; and shall protect carefully from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their locations and shall not remove them until directed by the property owners. The street and highway signs and markers, that are to be affected

by the Work, shall be carefully removed when the work begins and stored in a manner to keep them clean and dry. The Contractor must obtain all necessary information in regard to existing utilities, and shall give notice in writing to the owners of the property or the authorities in charge of streets, gas, water, pipes, electric, sewers and other underground structures, including conduits, railways, poles and pole lines, manholes, catch basins, fixtures, appurtenances, and all other property that may be affected by the Contractor's operations, at least three (3) working days before his operations will affect such property or as specified elsewhere. The Contractor shall not hinder or interfere with any person in the protection of such work or with the operation of utilities, at any time. When property or the operation of railways, telephone lines, telegraph lines or other public utilities are endangered, the Contractor shall at his own expense, maintain flagmen or watchmen and any other necessary precautions to avoid interruption of service or damage to life or property, and shall promptly repair, restore, or make good injury or damage caused by his operations in an acceptable manner.

### **SECTION 1.12 - UTILITIES EXPLORATION**

Utilities exploration shall include all labor, materials, and equipment necessary for the Contractor to conduct a field investigation including exploratory excavations in advance of construction for the purpose of determining the existing location, size, and depth of all underground utilities shown or identified on the Drawings, any and all meetings with representatives of each utility, and furnishing the information to the Engineer. In addition to those utilities indicated on the Drawings, the Contractor shall also make exploratory excavations of all utilities which could impact the construction. This work shall include all test pit excavations including backfilling with sand, compaction, dewatering, pavement removal and replacement, and other related items. No direct payment shall be made for utility exploration.

### **SECTION 1.13 - SECURITY**

Contractor shall be responsible for protection of the site, and all work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons.

No claim shall be made against the City by reason of any act of an employee or trespasser, and Contractor shall make good all damage to the City's property resulting from his failure to provide security measures as specified.

Security measures shall be at least equal to those usually provided by the City to protect his existing facilities during normal operation, but shall also include such additional, security fencing, barricades, lighting, watchman services, and other measures as required to protect the site.

### **SECTION 1.14 - TEMPORARY UTILITIES**

A. Temporary Lighting: Contractor shall provide, at his expense, temporary lighting facilities for prosecution and inspection of the work. These facilities shall be installed and maintained by the Contractor. Locate in such a manner as to result in the least interference with work upon the Project site and existing facilities. Contractor shall also provide temporary street lighting where the existing street lighting is disrupted due to construction activities.

B. Temporary Power: Contractor shall provide, at his expense, temporary power facilities required for prosecution and inspection of the Work. These facilities shall be installed and maintained by the Contractor. Locate in such a manner as to result in the least interference with work upon the Project

site and existing facilities.

C. Temporary Water: The Contractor shall make the necessary arrangements, at his expense, for securing and transporting all water required in the construction, including water required for the mixing of concrete, sprinkling, flushing, flooding, or jetting, and including any temporary pipeline or equipment which may be necessary to make use of such water.

D. Temporary Sanitary Facilities: The Contractor shall provide, at his expense, adequate portable sanitary facilities on the site and shall be obscured from public view to the greatest extent possible. They shall be cleaned, deodorized, and disinfected each day construction is in progress, all at the Contractor's expense. If toilets of the chemically tested type are used, at least one toilet will be furnished for each 20 workers, in addition to the above requirement. Contractor shall enforce the use of such sanitary facilities by all personnel at the site.

### **SECTION 1.15 – INCLEMENT WEATHER DAYS**

For this Contract, an Inclement Weather Day shall be defined as any day on which construction operations were unable to proceed for at least five (5) continuous hours of the day or 65% of the regular working hours, whichever is greater. Should the Contractor prepare to begin work on any given day in which inclement weather, or the conditions resulting from inclement weather, prevent work from beginning at the usual starting time, and the crew is dismissed as a result thereof, the day will be declared an Inclement Weather Day, whether or not conditions change during the day, resulting in the rest of the day becoming suitable for work. The Contractor shall notify DPW within 48 hours of an Inclement Weather Delay listing the critical path tasks affected by the delay.

### **SECTION 1.16 - AS-BUILT DRAWINGS**

Contractor shall provide manually marked-up “red line” drawings to the project engineer for use in creating “as-built” AutoCAD® record drawings of the project. The original contract drawings shall be modified to show all additions, deletions, and other changes made during construction. Drawing modifications shall include both a markup of the graphics and a brief written explanation describing any changes. Wherever applicable, revisions shall include updates to details, sections, index, notes, drawing callouts, plan, and plan & profile views.

Each Sheet of the red line drawings shall include a stamp showing: RED-LINE DRAWINGS, name of Contractor, Superintendent’s signature, and Date. Drawings shall also include: All field changes, any change in line or grade from the original drawings, location of mains and house service connections, and the limits of pavement removal and replacement.

To promote accuracy; red line drawings shall be updated on a bi-weekly basis with copies provided to the Director as work is completed for each block. Redlines shall be jointly reviewed/developed by the Contractor and Resident Inspector and discussed at each construction progress meeting. The Contractor shall furnish a final set of redline drawings prior to final inspection. The Contractor shall furnish redline drawings at no direct payment.

### **SECTION 1.17 - PROGRESS MEETINGS & SCHEDULE REQUIREMENTS**

A. Progress meetings shall be scheduled biweekly or as requested by the Director.

B. Location of Meetings: The project field office of the Contractor or as approved by the Director.

C. Attendance: Director's Representative, Contractor, subcontractors, and suppliers as appropriate to the agenda, others as required.

D. Requirement: In addition to an updated approved schedule, the Contractor shall also provide a detailed two week look ahead schedule demonstrating the block locations along with the scope to be performed and present it to the Project Team as shown on the agenda. The Project Team shall review the requested schedule at the progress meeting and agree on an approved list of locations and scope of work. Contractor to provide CPM schedule, two-week look ahead schedule, RFI log, Plan Change Log, Submittal Log, and invoice status at each progress meeting.

E. Format: The Department will provide a two week look ahead schedule template at the Pre-Construction meeting, which shall be completed prior to all progress meetings. The Contractor's CPM schedule shall include the following criteria:

1. Schedule shall have a title that includes the DPW Project ID and name.
2. The project schedule shall depict all field activities necessary to complete the work.
3. Activities shall be sufficiently detailed to include the block number, and a start/end date.
4. All schedule activities should be fully integrated, having predecessors and or successors.
5. Gantt chart shall show the predecessors and successors of each activity.
6. Critical Path Activities should be uniquely identified in the Gantt chart legend.
7. Schedules shall have a progress line in the Gantt chart that represents contractors progress to the date of the request.

F. Obligation: The Contractor shall abide by the schedule shown on the approved two week look ahead schedule. The Contractor shall not deviate from the approved schedule at any time, without obtaining prior approval. Shall deviations of the approved schedule be required, the Contractor shall submit deviations, in writing, requesting approval of the new locations and scope of work.

G. Repercussion: Failure to adhere to the approved two week look ahead will put the contractor in default and may result in a stop work order or termination of the contract for cause. This includes all work deviated from the approved schedule, including subcontractor work.

## **SECTION 1.18 – PRE-CONSTRUCTION VIDEO SURVEYS**

Section C126.05 of the "General Specifications for Street Paving" is amended to include the following requirements:

Pre-Construction Video Surveys are optional and be performed at the Contractor's discretion. There shall be no direct payment for the Pre-Construction Video Surveys.

## **SECTION 1.19 – CONTRACTOR PROGRESS PAYMENT INVOICING AND DOCUMENTATION**

Contractor shall be required to provide a detailed breakdown of each payment request that includes a summary of the work completed for each bid item by each municipal block. Additionally, a summary of the work completed for each bid item for each intersection, identified as “Intersection of (insert street name) Street and (insert cross street name) Street” shall be provided for quantification purposed blocks begin/end at the apparent right-of-way line of intersecting streets as shown on the plans. Contractor shall be required to provide separate invoices for the following categories when applicable:

- A.1.1 City of New Orleans Department of Public Works FEMA Eligible work items,
- A.1.3 City of New Orleans Department of Public Works FEMA ADA Eligible work items,
- A.2 City of New Orleans Department of Public Works non-FEMA Eligible work items,
- B.1.1 Sewerage and Water Board of New Orleans FEMA Eligible work items,
- B.1.2 Sewerage and Water Board of New Orleans FEMA ESSA Eligible work items,
- B.1.3 Sewerage and Water Board of New Orleans ADA Eligible work items,
- B.1.4 Sewerage and Water Board of New Orleans additional FEMA Eligible waterline work items,
- B.2.1 Sewerage and Water Board of New Orleans Water non-FEMA Eligible waterline work items,
- B.2.2 Sewerage and Water Board of New Orleans Water non-FEMA Eligible SSERP work items,
- B.2.3 Sewerage and Water Board of New Orleans non-FEMA Eligible sewer work items,
- B.2.4 Sewerage and Water Board of New Orleans non-FEMA Eligible drainage work items

The Director will provide invoice and form templates, and direction to the Contractor on which work is non-FEMA Eligible.

Each contractor payment request shall include:

1. Two (2) original invoices certified by the Engineer and SWB (if applicable) signed in blue ink. All invoices shall include the FEMA PW number and the DPW reference number. Invoices shall be submitted monthly and shall include the billing period.
2. Two (2) original DPW STS-651 and PWC-15 forms certified by the Engineer and SWB (if applicable) signed in blue ink.
3. Two (2) Compact discs with all invoice forms and backup including but not limited to:
  - a. Cover letter containing: Date, project ID, project name, invoice No., pay Period, Invoice amount, company logo, Purchase Order No., Service Contract No., FEMA PW No. 21032 and SWB PW No. 21031 (if applicable).
  - b. Pre and post construction photographs for all completed work
  - c. ADA ramp breakdown by location per funding source
  - d. DPW cost estimate STS-651 and PWC-15 Excel workbook.
  - e. Certified payroll (if required)
  - f. Updated approved CPM Schedule
  - g. Approved Weather and Working Days report
  - h. BMP/SCM Inspection Report with weather conditions noted and if rain occurred, appropriate photographs documenting Stormwater Pollution Prevention Plan Stormwater Control Measures in place.



## **SECTION 1.20 - SEQUENCE OF CONSTRUCTION**

A. Section 1.05 of these Construction Specifications and Section C126 of the General Specifications are hereby supplemented as follows:

B. The Contractor shall submit construction sequence and schedule to the Director for approval prior to the start of construction in accordance with Section C126. Contractor shall be required to follow the approved sequence and schedule unless he has first obtained written approval from the Department for a deviation.

C. Contractor shall, within three (3) days of initiating any work on a street, prepare and submit to the Department for review, a practical critical path schedule and phasing plan showing the order in which the Contractor proposes to carry on the work, the dates on which he will start the phases of the work, and the anticipated dates for completion of the same. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion at any time. The Contractor shall enter on the chart the actual progress and present the updated information at each bi-weekly contractor/owner construction meeting or at such intervals as validated by the Director and shall provide electronically to the Director.

D. To facilitate Director testing and inspection requirements once Contractor starts utility work the utility installations shall be executed on a continuous basis until substantial completion of all of the utility work. Contractor shall substantially complete all work, including pavement restoration, for any continuous roadway segment with water and/or sewer work prior to initiating operations on roadway segments consisting of only roadway pavement restoration work, unless approved in writing by the Director. Once Contractor mobilizes to start work on a roadway segment Contractor must complete all approved work, including any necessary utility repairs or relocations in a continuous fashion within the approved scheduled time and shall maintain adequate personnel and equipment on site until such time all work is substantially complete. Work to be substantially completed includes, but is not limited to, utility replacement or rehabilitation, including all services, connections, and tie-ins; roadway repairs; curbs and gutters; drive aprons; sidewalks; ramps; proper backfilling of all cavities; and other incidental work in accordance with the project plans and specifications. Any work restricting access to any street, drive, or sidewalk shall be completed prior to substantial completion being granted. If to meet the approved schedule the contractor elects to work on multiple sites simultaneously the contractor must ensure the proper resources are available in order to adequately handle all the work in progress as specified. Contractor is responsible for performing all tasks to substantially complete all work in a concentrated area prior to moving onto another work area.

E. When scheduling work Contractor shall phase limits of construction to allow completion of all pavement work within ten (10) working days unless otherwise approved by the Director. The Contractor shall use traffic aggregate or steel plates for pavement activities exceeding ten (10) working days to minimize impacts to traffic flow in accordance with Section C402 in the General Specifications. Pavement repair shall commence immediately following the acceptance of the waterline installation on each block. In addition, Contractor shall only perform utility trenching operations ahead a distance sufficient for the length of pipe installation planned for the current workday, plus a reasonable additional distance ahead to reveal any obstructions that may necessitate changing the line or grade of the pipe. All other associated work within the scheduled work limits shall be completed in accordance with the approved critical path schedule and phasing plan.

F. Contractor shall phase all roadway construction including intersections to allow for the

maintenance of traffic and emergency vehicle access.

G. Contractor shall notify the Sewerage & Water Board and the Director in writing at least two (2) working days prior to mobilizing and starting any utility work, including trenching, and at least two (2) working days prior to the day utility tie-ins to the existing system will be made and service will be transferred to the new main. These notifications shall be in addition to any other notification in accordance with Sewerage & Water Board requirements and per the project plans and specifications. Contractor shall notify the Director in writing at least two (2) working days prior performing any roadway restoration work detailed on the plans or include in approved plan changes, including removal operations.

H. Contractor shall receive no additional compensation for any work related to the means, methods, techniques, scheduling, sequences, or procedures that are required to complete the project in accordance with the project plans and specifications.

## **SECTION 1.22 – WATER POINT REPAIRS**

A. The Contractor shall furnish all labor, supervision, materials, and equipment required to complete items in this section.

B. All workmanship and materials shall conform to Section C741 of the Department of Public Works General Specifications for Street Paving, S&WB Dwg. No. 7260-W, and S&WB Standard Drawings, except as noted herein.

C. The Contractor shall examine the locations of every plan sheet, well in advance of any planned construction within that block, and report all leaks to the S&WB by calling in 52-WATER (529-2837).

D. Damages to the water distribution system caused by the Contractor, shall be repaired by the Contractor at no direct pay, or repaired by the S&WB at the Contractor's expense. If in the opinion of the Engineer that damages to the water distribution system were not a result of the Contractor's normal construction activities, the contractor will be paid at the unit prices of the appropriate bid item.

E. The Contractor shall inspect and identify existing service connections. All lead service lines (LSL) exposed within the project limits, regardless of status of utility replacement at the location of the LSL, shall be reported to the S&WB project representative immediately. **All service line material identifications shall be reported in Excel spreadsheet or PDF format with address, water meter inlet and outlet material, and field photos of service line. This report shall be submitted to S&WB every 7 calendar days until inspections are completed.** Resident must receive S&WB-approved written notification at the time any LSL is located and/or replaced.” Work to replace the LSL shall not commence until **5 days** after the resident is issued a S&WB-approved written notice for lead material located and service connection shutoff.

F. If directed to replace the LSL, the service connection must be replaced from the water main to the meter box. Temporary splices or repairs of leaking or damaged LSLs are not allowed. If directed by S&WB project representative to relocate water meter location, the pipe material must be identified between the meter box and property line. If the service line between the meter and the property line is of lead material, the Contractor and S&WB shall coordinate with the property owner to ensure the entire LSL is replaced between the water main and the property. **If the service line from meter to property line is of lead material and not replaced, the material must be recorded and included in a**



report that shall be submitted to SWBNO monthly.

G. The Contractor shall inspect and identify existing service connections at school meter locations. The Contractor shall identify service connection pipe size and material of the inlet and outlet of water meter and report to the S&WB for each meter inspection. The Contractor shall provide a written report **weekly** for each meter containing school name, address, meter location (consisting of latitude and longitude), pipe size, pipe material, and photos of inlet & outlet. Inspection and identification of each school location must be completed within **60** calendar days.

H. Upon completion of LSL replacement, the Contractor shall begin and complete surface restoration within **10** calendar days. Surface restoration includes but are not limited to concrete pavement, asphalt pavement, concrete curb, granite/stone curb, concrete sidewalk, concrete driveway, brick/decorative sidewalk/driveway, and traffic maintenance aggregate.

J. Contractor shall refer to section 2.12 and section 3.23 for technical specifications and special pay items specific to the work in this section.

### **SECTION 1.23 – CONTRACT TASK ORDERS**

The successful bidder shall be awarded the work for a period of 365 calendar days starting from the day after the Overall Notice to Proceed, which shall constitute the overall duration or contract period. The contract prices are firm during the entirety of the project.

The quantities given in the proposal form are approximate for the comparison of bids only. The Sewerage and Water Board of New Orleans (SWBNO) reserves the right to purchase only such items and in such quantities as needed for the duration of this contract after acceptance of the lowest responsible bid. Additional unit price quantities will be in accordance with Section C136 of CNO's General Specifications. The Board also reserves the right to perform part of the work with its in-house forces or hire other contractors for similar work in the project area during the contract period.

The overall project scope shall be broken down and delineated as individual Task Orders in contract documents. Each Task Order may consist of one or multiple plan sheets, which will serve as the scope for that specific Task Order to include all utilities, roadway, and associated infrastructure work per the associated plan sheets.

Contract Task Orders shall be issued to the Contractor individually or grouped with multiple Task Orders at once, at the discretion of SWBNO. Prior to issuance of a Task Order, Contractor and SWBNO will hold a Pre-Task Order Meeting to discuss scope, schedule, and delivery strategy. Task Order durations shall be determined by the Contractor during the Pre-Construction Meeting. Exhibit 1, attached at the end of this section, is a sample Task Order to be utilized for this process.

All work within the limits of each Task Order shall be shown to the Contractor by a representative of SWBNO prior to commencing work. Appropriate drawings and details will be furnished to the Contractor with each Task Order. Work sites may be non-continuous blocks for an individual task order; however, every effort will be made to consolidate the work to minimize scattered work sites.

Each Task Order will be issued with appropriate drawings or other attachments and will designate a specific Task Order number. All correspondence, billing, etc., pertaining to the work should reference the Task Order number and the current job number designation.

The Contractor shall begin the work within Ten (10) days after issuance of an executed task order and a corresponding Task Order Notice to Proceed. If the Contractor fails to start a task order within Ten (10) days of the Notice to Proceed date or leaves the work incomplete for over a 30-day period, the Board shall proceed in accordance with Sections C123 and C126 of CNO's General Specifications or shall approach the next lowest bidder to start and/or complete the Task Order(s) or utilize other contractors to perform the work. However, if the Contractor has a valid reason for the lack of progress or delayed start of an issued Task Order that is beyond the Contractor's control, he must obtain written permission from SWBNO for the stipulated delay.

SWBNO reserves the right to put a Task Order on hold at any time as needed, without reason. If the scope of work is discontinued, the Contractor will be compensated only for the completed and accepted items of work. SWBNO reserves the right to modify, add, or remove scope within an issued Task Order as needed to best serve the Project. Temporary waterline tie-ins shall be abandoned, removed, and tied into the adjacent mainline in accordance with Section C741 in CNO's General Specifications at no direct pay.

Beyond the initial Task Order issued for said Project, additional Task Orders shall be issued only when the previously issued Task Order is deemed Substantially Complete by the SWBNO. The Contractor can request additional task orders to be issued and approved by SWBNO. Substantial Completion, as defined for this purpose, shall be determined by one or more of the following criteria:

- Issued work within a given Task Order is 100% complete for lead service line replacement.
- Issued work within a given Task Order is 80% complete for all restoration (sidewalk, driveway, curb, gutter, roadway) of given lead service line replacements.
- Any minor incomplete work or Punch List items which typically consist of addressing areas in need of minor backfilling, completion of pavement striping, necessary yard restorations, patching, site cleanup, etc.

Additional Task Orders on the project shall only be issued when the preceding task orders are either complete or substantially complete, as defined above. The Contractor can request additional task orders to be issued and approved by SWBNO. If the Contractor fails to complete a task order within the agreed time frame or leaves the work incomplete or inactive for a period of Thirty (30) days, absent any previously agreed upon stipulated delay claim, SWBNO shall proceed in accordance with Sections C123 and C126 of CNO's General Specifications and reserves the right to complete the remainder of that task order, as well as all additional remaining work included in the overall project scope by either the use of SWBNO work forces or other contractors. The Contractor shall notify SWBNO within 48 hours of a critical path task delay listing the critical path tasks affected by the delay.

It is understood by the Contractor that the quantities provided in the schedule of bid prices are a fair approximation of the amount of work to be done, and that the sum of the products of the approximate quantities multiplied by the unit price bid constitutes the base bid price, which sum shall be used in the comparison of bids and the awarding of the respective contracts. The unit cost quantities represent a complete cost total, representing all work required to provide a completed project scope.

The actual constructed quantities may vary from the quantities listed in the proposal form.

**EXHIBIT 1**  
**SWBNO – CN 2167**  
**New Orleans, LOUISIANA**  
**TASK ORDER 01**

Sewerage and Water Board of New Orleans

8800 S Claiborne Ave  
New Orleans, LA 70118

Estimated Cost:  
Plan Sheets:  
Contractor:

Date Issued:  
  
Contract No. 2167

You are hereby directed to commence work within 10 days of the date of this work order and complete all work, including restoration, within XX days, in accordance with project specifications. If this task order is not substantially completed within XX days, no further task orders will be issued.

See attached Plan Sheets for details of **Task Order 01**.

**Description:**

Task Order 01 contains XX sheets located within Orleans Parish. **Special attention shall be given to the roadway elevations to ensure positive drainage to the adjacent catch basins.** All work described in the attached plan sheets is subject to field verification. Variations shall be approved by the Engineer. The following is a list of the plan sheets associated with Task Order 01.

Site Location	SWB Sheet(s)
XXX	XX

SIGNED:

Contractor.: \_\_\_\_\_ DATE: \_\_\_\_\_

SWBNO.: \_\_\_\_\_ DATE: \_\_\_\_\_

Attachments

## **SECTION 1.25 – ENVIRONMENTAL PROTECTION AND STORM WATER POLLUTION PREVENTION**

Environmental Protection and Storm Water Pollution Prevention Plan shall be in accordance with Section C204 Environmental Protection and Stormwater Pollution Prevention Plan from the General Specifications except as modified here-in.

The Contractor certifies under penalty of law that he understands and will abide by the terms and conditions of the following:

1. Permit LAR10M21: Orleans Parish-wide coverage for Storm Water Discharges Associated with Construction Activities five (5) acres or more for the JIRR Program

2. Sewerage & Water Board of New Orleans Plumbing Code

3. The Joint Infrastructure Recovery Request (JIRR) Program is authorized under LPDES Permit LAR10M215 that encompasses all of Orleans Parish for Storm Water Discharges Associated with Construction Activities five (5) acres or more. The permit had an effective date of June 8, 2020 and expiration date is March 28, 2024. This permit coverage alone automatically mandates that all JIRR projects regardless of the project size will be part of a “larger common plan of development” Since the entire program is covered, the contractor does not have to obtain a state-issued permit from LDEQ; regardless, an adequate Stormwater Pollution Prevention Plan shall be developed and maintained regardless of the size of the project.

4. Compliance with JIRR Permit LAR10M21.

## **SECTION 1.26 – PROJECT SIGN REQUIREMENTS**

A. The Contractor shall have a weatherproof outdoor DWRLF Project Sign constructed per specifications set forth in Attachment No. 13 to Supplementary Conditions. The DWRLF Project Sign shall be displayed conspicuously in an easily visible, prominent location on-site or reasonably near the construction area that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period. Electronic graphic file versions of the emblems used in the sign are available by request from DWRLF. The Contractor shall coordinate with the S&WB to display appropriate project information on the DWRLF Project Sign.

B. The Contractor shall have a weatherproof outdoor BIL Project sign constructed per specifications set forth in Attachment No. 13 to Supplementary Conditions. The BIL Project sign shall be displayed conspicuously in an easily visible, prominent location on-site or reasonably near the construction area that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period. Electronic graphic file versions of the emblems used in the sign are available by request from DWRLF.

## **SECTION 1.27 – PROHIBITION ON CERTAIN ELECTRONIC EQUIPMENT**

As provided by 2 CFR 200.216, the funding agency for this project requires that funds must not be obligated or expended (i) to procure or obtain, (ii) to extend or renew a contract to procure or obtain, or (iii) to enter into a contract (or extend or renew a contract) to procure or obtain any equipment, services, or systems that use ‘Covered Telecommunications Equipment or Services’ as a substantial or essential component of any system, or as critical technology as part of any system. For purposes of this paragraph, ‘Covered Telecommunications Equipment or Services’ means any telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

Additionally, the funding agency for this project requires that funds must not be expended to purchase any of the following:

- (a) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (b) Telecommunications or video surveillance services provided by such entities or using such equipment;
- (c) Telecommunications or video surveillance equipment or services produced or provided by an entity that the U.S. Secretary of Defense, in consultation with the U.S. Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

By entering into this contract, the Contractor acknowledges that they will fully comply with the restrictions and prohibition on certain electronic equipment as described above. The Contractor also understands that they will not be compensated for any such expenditures that do not meet the above requirements and that they are responsible for ensuring the project components meet the above noted restrictions.

PLEASE NOTE: The manufacturer of the proposed electronic equipment must be checked on the SAMS website noted below. Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the System for Award Management (SAM) exclusion list at: <https://www.sam.gov/SAM/>. **The Contractor must verify that any telecommunications equipment being purchased or used as part of this contract for which reimbursement is being sought are NOT listed as excluded in the SAMs system by providing search results to the Owner.** Loan recipients will be required to present/submit SAMs search results documenting compliance for any telecommunications equipment or services being invoiced on a payment request.

## **PART II – SUPPLEMENT TECHNICAL SPECIFICATIONS**

### **SECTION 2.01 - REMOVAL OF EXISTING PAVEMENT**

- A. All existing pavement designated to be removed shall be removed and disposed of beyond the limits of project by the Contractor.
- B. Payment for concrete and asphaltic concrete pavement removal shall include removal, hauling and disposing of pavement off of the project site.
- C. Pavement consisting of asphaltic concrete over Portland cement concrete shall be considered Composite Pavement. Composite Pavement shall be removed, without regard to thickness, at the price bid per square yard for REMOVAL AND DISPOSAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT. There will be no additional payment if the Contractor elects to cold mill or remove the existing asphalt surface prior to removal of the concrete pavement.
- D. Payment for the pay item C202(52)(C) REMOVAL AND DISPOSAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT shall be made at the contract unit price, including removal and disposal of existing curb at no direct pay.

### **SECTION 2.02 - CURBS OR CURB AND GUTTER BOTTOMS**

The Contractor shall remove and dispose of all existing curb or curb and gutter bottoms in accordance with the plans. Existing stone curb to be removed shall be delivered to the Department of Public Works Maintenance Yard located at 838 South Genois Street unless directed by the Owner (No additional pay for disposal).

Price for new dowel curbs in new concrete pavement shall include horizontal dowels and longitudinal reinforcement as detailed on the standard plan by the City of New Orleans Department of Public Works (DPW).

Price for new curb shall include transitions, depression or hand forming curbs at obstructions as may be directed by the Director or required by the Department of Parks and Parkways.

The Contractor shall backfill and compact behind curb with select material obtained from roadway excavation or other approved sources and install the top 4 inches with batture sand behind the curb for dressing and beneath sidewalks and driveways at no direct pay. Payment shall be included in the unit price bid for curbs, sidewalks, or driveways as applicable.

Price for new curb and gutters associated with new asphalt pavement shall include all transverse and longitudinal reinforcement in conformance with the details on standard plan by DPW included with these specifications.

Price for new curb or curb and gutters associated with Handicapped Ramp construction shall be measured and paid for as subsidiary to unit price bid for ADA-ACCESSIBLE CURB RAMPS, CURB AND GUTTER, AND CONCRETE SIDEWALKS AT INTERSECTIONS.

### **SECTION 2.03 - REMOVAL OF EXISTING SIDEWALKS, DRIVEWAYS, AND FOOTLAPS**

Existing concrete sidewalk, driveway, and footlaps shown to be removed shall be removed and properly disposed of by the Contractor. At locations where sidewalk, driveway, or footlaps are to be removed but are not to be replaced, the contractor shall backfill the area with selected excavated or other suitable approved material at no direct payment.

### **SECTION 2.04 - EXCAVATION**

- A. Limits of roadway excavation are shown on the plans and are measured from the bottom of the existing pavement to the bottom of the base course, and/or sub-base (where applicable). All excavated material shall be hauled and disposed of off the project site.
- B. The quantity shown in the proposal form is approximate and is included for information purposes only. Partial payments for excavation will be made on a percentage basis computed from the ratio of linear foot of roadway excavation completed to the total length of roadway in the project.

### **SECTION 2.05 - CONSTRUCTION ROUTING AND MAINTENANCE**

The Contractor must minimize damage to streets used for access to the project for the delivery of materials and equipment by observing weight and speed limits as defined in the City Code in Section 38-169 and 38-73 (h) respectively. Access routes to the work site from designated "truck routes" will be established at the preconstruction meeting. The Contractor and his subcontractor(s) will be required to adhere to these routes to and from the project site. The routes may be revised by the Director to accommodate the work as it progresses. The Contractor is required to keep the work site clean, particularly the roadways adjacent to the work site. The Contractor shall clear such roadways of dirt, silt sand or other such material as often as necessary, or as specified by condition at the close of each workday.

### **SECTION 2.06 - SHEETING AND BRACING**

- A. Sheeting and bracing shall meet the design, material, installation, and maintenance requirements of all SAFETY AND HEALTH REGULATIONS.
- B. The cost of sheeting and bracing shall be included in the unit price bid per linear foot for drain, sewer, or water lines.
- C. The Contractor shall provide design services, materials, and labor necessary for sheeting, shoring, and bracing of excavations as required for trenches in a safe working condition. The Contractor shall provide for protections and supports of utilities, roadways, buildings, and structures, etc. when performing project work. The Contractor shall provide an adequate system to withstand lateral pressure in trenches, in accordance with local, state, and federal regulations. Where required to be designed by a licensed engineer, the sheeting and shoring plan must be submitted to the Engineer for his records.



## SECTION 2.12 – WATER POINT REPAIRS

- A. The supplemental specifications within this section are applicable to water related work not listed as a standard bid item in Section C741. Any general conditions, materials or methods not discussed within this section shall be governed by the DPW Standard Specifications Section C742 and the S&WB standard details and specifications.
- B. Water point repairs shall be completed in accordance with this section as well as DPW General Specifications Section C741.02.2 and Special Provisions Section 1.22.
- C. Point repairs of an existing water main shall consist of recaulking an existing lead bell joint and installing a bell joint clamp, repairing a leak on the water main by installing a full circular stainless steel repair clamp, or replacing a section of existing water main.
- D. Point repairs of an existing water house connections 5/8” to 2” shall consist of replacing the entire service connection from the water main to the meter. Existing 5/8” and 3/4” services shall be replaced with 1” Polyethylene (PE) tubing. There shall be no splices allowed in repair of the existing water house connection, unless directed by the Engineer.
- E. Point repairs of an existing water house connection greater than 2” shall consist of replacement of existing pipe with polyvinyl chloride (PVC) of equal diameter from the main to the shut-off valve where practical. Couplings used to make connections between existing and new pipe shall be AWWA approved and pressure rated as required by S&WB.
- F. New water mains sized 2-inch shall be Polyethylene plastic tubing (PE4710, DR 9) conforming to ASTM D2737 and AWWA C901-17, latest edition, and shall be compliant with NSF/ANSI 61. All bronze and brass fittings, connectors, corporation stops, and any other appurtenance used to complete the installation of the water main shall be of domestic manufacture and be lead free. Polyethylene pipe shall be jointed by thermal butt-fusion , flange assemblies, or polyethylene mechanical joint adapters. Installation shall be in accordance with manufacturer’s recommendation.
- G. All new water mains shall be polyethylene plastic tubing (PE4710, DR 9) conforming to ASTM D2737 and AWWA C901-17, latest edition, and shall be compliant with NSF/ANSI 61. All bronze and brass fittings, connectors, corporation stops, and any other appurtenance used to complete the installation of the water main shall be of domestic manufacture and be lead free. Polyethylene pipe shall be jointed by thermal butt-fusion, flange assemblies, or polyethylene mechanical joint adapters. Installation shall be in accordance with manufacturer’s recommendation.
- H. All pipe joints shall be installed watertight under all service conditions. Any leaks from improperly installed or defective joints discovered at any time prior to the one-year maintenance period following substantial completion will be repaired by and at the expense of the Contractor.
- I. Before the water service is interrupted, the Contractor shall:
  - a) Expose the existing water main at the repair point location and verify the type, size, and elevation of the existing service.
  - b) Have sufficient materials, equipment, and manpower available at the job site.

- c) Verify materials on hand will meet the job needs after uncovering the existing mains.
- d) Request a water test closure through the S&WB Networks Department (942-3891) a minimum of thirty (30) working days in advance of the scheduled repair.
- e) Have notified all residents and the New Orleans Fire Department a minimum of five days in advance of interruption of service.
- f) Any damage caused by the Contractor, will be at the Contractor's own expense.

## **SECTION 2.13 – GEOTEXTILE FOR STABILIZATION**

- A. General: This work consists of furnishing and placing geotextile fabric in accordance with these specifications and in conformance with the details shown on the plans.
- B. Materials: The geotextile fabric shall conform to Section 1019, Class D.
- C. Construction Requirements: Rolls of geotextile fabric shall be kept covered at all times until used. Geotextile fabric that has been installed shall be covered with embankment within 7 calendar days. When ultraviolet damage occurs, the geotextile fabric shall be removed and replaced. The geotextile fabric shall be placed at the locations shown on the plans or as directed. Adjacent rolls of geotextile fabric will be overlapped or sewn. When rolls are overlapped, the overlap shall be a minimum of three (3') feet, including the ends of the rolls. The top layer of the geotextile fabric shall be parallel with adjacent rolls and in the direction of construction.
  - 1. Geotextile fabric shall be placed as smooth as possible with no wrinkles or folds, except curved road sections. For curved road sections, the geotextile fabric shall be folded to accommodate the curve. The fold shall be in the direction of construction and pinned or stapled. Ruts that occur during construction shall be filled and compacted prior to placement of geotextile fabric.
  - 2. Damaged geotextile fabric shall be either removed and replaced with new geotextile fabric or covered with a second layer of geotextile fabric extending three (3') feet in each direction from the damaged area.

## **SECTION 2.14 – GEOGRID**

These items shall be governed by the requirements of the “General Specifications for Street Paving,” the City of New Orleans, State of Louisiana, latest edition, Section C203 Geogrid, shall be the General Conditions for this Contract and shall govern except as modified here-in. Acceptable geogrid, when approved by the Engineer, shall meet the required material properties, geometry, and characteristics listed below.

PROPERTY	TEST METHOD	UNITS	GEOGRID OPTION VALUES	
<b>Geometry</b>				
Aperture Shape			Square	Equilateral Triangular
Aperture size	I.D. Calipered or Observed	in (mm)		1.6 (40) (nom)
MD		in (mm)	1.3 (33) (nom)	
CMD		in (mm)	1.3 (33) (nom)	
Thickness				
Ribs	Calipered	in (mm)		0.05 (1.2) (nom)
MD	Calipered	in (mm)	0.09 (2.4) (nom)	
CMD	Calipered	in (mm)	0.06 (1.5) (nom)	
Junctions	Calipered	in (mm)	0.125 (3.2) (nom)	0.13 (3.3) (nom)
<b>Physical Characteristics</b>				
Tensile Strength @ 2% Strain				
MD	ASTM D6637	lb/ft (kn/m)	650 (9.5)	
CMD	ASTM D6637	lb/ft (kn/m)	685 (10)	
Tensile Strength @ 5% Strain				
MD	ASTM D6637	lb/ft (kn/m)	1164 (17)	
CMD	ASTM D6637	lb/ft (kn/m)	1300 (19)	
Ultimate Tensile Strength				
MD	ASTM D6637	lb/ft (kn/m)	1713 (25)	
CMD	ASTM D6637	lb/ft (kn/m)	1775 (26)	
Overall Flexural Stiffness	ASTM D7748	mg-cm	2,150,000 (min)	
Radial Stiffness at 0.5% strain	ASTM D6637	lb/ft	38,500 (min)	18,495 (min)
Aperture Stability	ASTM D7864	m-N/deg	0.80 (min)	
Junction Efficiency	ASTM D6637 & D7737	%	93 (min)	93 (min)
<b>Material</b>				
Polypropylene	ASTM D-4101 Group 1/Class 1/Grade 2	%	98 (min)	98 (min)
Carbon Black	ASTM 4218	%	0.5 (min)	0.5 (min)

## **SECTION 2.15 – VIBRATIONS DUE TO CONSTRUCTION ACTIVITIES**

Section C126 of the “General Specifications for Street Paving” is amended to include the following requirements:

The vibration monitoring is optional and be performed at the Contractor’s discretion. There shall be no direct payment for vibration monitoring services.

## **SECTION 2.16 – SUPERPAVE ASPHALTIC CONCRETE REQUIREMENTS**

All Superpave asphaltic concrete placement shall conform to Section C502 except where modified here within.

Roadway quality control, roadway acceptance, and surface tolerance shall apply to this project and shall conform to Section C501.

Superpave asphaltic concrete binder course placement shall consist of  $\frac{3}{4}$  inch (0.75") maximum nominal aggregate size. Superpave asphaltic concrete wearing course mixture shall consist of  $\frac{1}{2}$  inch (.5") maximum nominal aggregate size. Grade of Asphalt Cement shall be at minimum a PG 67-22. The Engineer shall verify the correct material is used and ensure that roadway density requirements are met in accordance with the contract documents.

The thickness of Superpave binder course shall be placed with a 5" section. Two (2) lifts shall be used: one at 3" and then one at 2". The thickness of Superpave wearing course shall be placed with a 2" section using one single lift.

NTSS-1HM (trackless tack) shall be considered as an acceptable prime coat when requested by the Contractor, approved by the Engineer, and follows the requirements of Section 505 from the latest version of LaDOTD Louisiana Standard Specifications for Roads and Bridges.

When the Owner determines that a core sample shall be obtained, the samples will be drilled by the Contractor at the locations determined by the Director at no direct pay and those samples shall be provided to the Department.

## **SECTION 2.17 – INTERIM ASPHALT PAVEMENT**

Temporary asphalt pavement shall be same mix as asphaltic concrete wearing course; shall be a minimum of two (2) inches thick; shall be placed over a minimum of six (6) inches of compacted crushed stone or crushed concrete and encapsulated in a layer of geotextile fabric.

Measurement and payment for interim asphalt pavement shall be made at the unit price bid per square yard for Special Bid Item No. CF-501 INSTALL TEMPORARY PAVEMENT, 2" THICK when listed on the Unit Price Form.

## **SECTION 2.18 – BASE COURSE**

All Base Course materials shall conform to section C302 except where modified here within.

Gray Limestone stone conforming to section C302.03 part C is the acceptable material for base course.

Recycled Portland Cement Concrete is not acceptable as a base course material. This is acceptable as a Traffic Maintenance Aggregate.

## **SECTION 2.19 – WATERLINE PIPE BURSTING**

- (a)** Where called for in the Plans, the new water main shall be installed by replacing an existing water line with a new high-density polyethylene (HDPE) water line by means of pipe bursting and includes the excavation and restoration of water service house connections. The contractor is responsible for the excavation and restoration of receiving and insertion pits, including the removal and replacement of existing manholes. The contractor shall provide all supervision, labor, materials, equipment, tools, fuel, power, water, and incidentals required to perform all pipe bursting activities.
- (b)** When not called for in the Plans pipe bursting utilizing HDPE at the same location as the original water main will be allowed as an alternative installation method on a case-by-case basis. The Contractor shall obtain approval by the Project Engineer prior to mobilization. In the event Pipe Bursting installation method is approved by the Project Engineer and SWBNO, the Director reserves the right to deduct scope and quantities for items deemed no longer necessary on the corresponding project block. Work is deemed no longer necessary at the Director’s discretion.
- (c)** Prior to starting the Work, the Contractor shall submit construction sequence and staging plan, proposed insertion and receiving pits, traffic control plan, temporary water supply layout, installation details and sketches, shop drawings, equipment catalog data, product specifications, and other pertinent information for the HDPE pipe installation work to be signed and stamped by a Professional Engineering licensed in the state of Louisiana at no direct pay.
- (d)** The new water main shall be installed by replacing an existing water line with a new high-density polyethylene (HDPE) water line by means of pipe bursting and includes the excavation and restoration of water service house connections. The Contractor is responsible for the excavation and restoration of receiving and insertion pits, including the removal and replacement of existing manholes. The Contractor shall provide all supervision, labor, materials, equipment, tools, fuel, power, water and incidentals required to perform all pipe bursting activities.
- (e)** The Contractor shall install, test, and connect the temporary water supply line and the service connection lines prior to the start of pipe bursting. All testing requirements shall be in accordance with Section C741.04.1 “Hydrostatic Testing” and C741.04.2 “Chlorination, Bacteria Sampling, and Flushing”. New service connections shall be paid at the contract bid item price. The temporary water line shall be completed at no direct pay.
- (f)** All new water mains 8 inch and greater installed via Pipe Bursting shall be high-density polyethylene pipe (HDPE) meeting the requirements of AWWA C906. The pipe shall be a minimum of SDR 11 wall thickness (pressure pipe) unless noted otherwise. The pipe shall contain no recycled compound except that generated in the manufacturer’s own plant from resin of the same specification from the same raw material pipe. Butt fittings shall conform to ASTM D 3261 and ASTM F 714. Ductile Iron fittings shall conform to standards within this Section. Pipe material delivered to the job site must clearly display the manufacturer information, nominal pip size, dimension ratio, the letters “PE” followed by the grade per ASTM D1248, and the hydrostatic design basis in pounds per square inch. There shall be a colored stripe along the length of the pipe indicating the pipe service type. Stiffener inserts used for all fittings and connections to HDPE pipe shall be of 304 stainless steel and be of wedge type design.
- (g)** Pipe material delivered to the job site must be properly stored to protect from damage and deformation, axially or circumferentially. All pipe is to be checked to verify its condition prior to

installation. Any pipe segment, which has cuts in the pipe wall exceeding 10 percent of the wall thickness, shall be cut out and removed from the site at the Contractor's cost.

- (h)** Sections of polyethylene pipe shall be joined into continuous lengths on the jobsite above ground, or in a trench when required by worksite conditions. The joining method shall be the butt fusion method conforming to ASTM D2657 and be performed in strict accordance with the pipe manufacturer's recommendations. The inside and outside of pipe ends shall be cleaned with a cotton or non-synthetic cloth to remove dirt, water, grease, and other foreign materials. The pipe ends shall be cut square and carefully aligned just prior to heating. The heater plate surfaces shall be cleaned regularly as needed to prevent accumulation of fusion welding residues or other substances that may result in faulty pipe joining. After achieving the proper melt pattern, the pipe ends shall be pressed together in a firm, rapid motion applying sufficient pressure to form a pipe bead (1/8 inch to 3/16 inch in height) around and inside the entire circumference of the pipe. Fusion equipment used in the joining procedure shall be capable of meeting all conditions recommended by the pipe manufacturer, including, but not limited to, fusion temperature, alignment, and fusion pressure. Electrofusion may be used for field closures when appropriate fusion equipment cannot be utilized in a trench type environment.
- (i)** When requested, the Contractor shall perform trial fusion welds in the field for both main line and lateral connections and submit samples to the Engineer for review prior to installation of the pipe. The fusion machine employed for the trial welds shall be the same machine to be utilized for the complete project installation work.
- (j)** The Contractor shall install the pipe by utilizing a constant tension system with a hydraulic or pneumatic bursting device that breaks away the existing pipe. A static "cone cracking" method may be used, but only by advancing the mole bursting head with a "solid steel tow rod" pulled by a constant tension hydraulic pulling wrenching system. The advancement of the bursting mole head with a chain shall be prohibited. At no time shall the bursting device and/or the installation process put any undue stress on the existing surface.
- (k)** Stiffener inserts used for all fittings and connections to HDPE pipe shall be of 304 stainless steel and be of wedge type design.
- (l)** After the completion of pipe bursting and installation of all fittings, offsets hydrant leads, valves, and service saddles but prior to switching service connections, the Contractor shall complete testing on the new main in accordance with Section C741.05. Following successful testing, the Contractor shall change over service connections from the temporary watermain to the new watermain.

The Contractor shall reference ASTM Standards:

- ASTM F 2620 - Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings
- ASTM D 3035 - Polyethylene Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter
- ASTM D 3261 - Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
- ASTM D 3350 - Polyethylene Plastic Pipe and Fittings Materials
- ASTM F 714 - Standard Specification for Polyethylene Plastic Pipe Based on Outside Diameter
- ASTM F 1055 - Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing



## **PART III – SPECIAL ITEMS**

### **SECTION 3.01 – TEMPORARY SIGNS, BARRICADES, PAVEMENT MARKINGS, CONSTRUCTION SIGNING, TRAFFIC MAINTENANCE AND PUBLIC SAFETY**

This item shall be governed by the provisions of General Specifications Section C129 Temporary Signs, Barricades, Pavement Markings, Construction Signing, Traffic Maintenance and Public Safety except as follows:

There shall be no direct payment for Temporary Signs, Barricades, Pavement Markings, Construction Signing, Traffic Maintenance and Public Safety. All costs associated with Temporary Signs, Barricades, Pavement Markings, Construction Signing, Traffic Maintenance and Public Safety shall be included in other major items of the proposal.

### **SECTION 3.02 – MOBILIZATION**

For this project mobilization will be considered as a subsidiary obligation of the contractor under other bid proposal items. There shall be no direct payment for mobilization, or for any items that may be referenced as subsidiary to or included in mobilization. All costs associated with mobilization shall be included in other major items of the proposal.

### **SECTION 3.03 – CLEARING AND GRUBBING AND DISPOSAL OF MATERIALS**

There shall be no direct payment for any required Clearing and Grubbing and removal and disposal of material not listed for removal in the proposal. There shall be no direct payment for removal and disposal of culverts, metal curb protection at intersections, metal plates at driveways, existing drain lines or drainage structures and other materials other than Portland Cement Concrete Pavement and Asphaltic Cement Concrete Pavement. All costs associated with Clearing and Grubbing, and removal and disposal of other material shall be considered subsidiary to and included in Roadway Excavation or other major bid items of the proposal.

### **SECTION 3.04 – CONSTRUCTION LAYOUT**

A. This item shall be governed by the requirements of Standard Specification Item C740(51) except as modified here-in. The Contractor will be responsible for laying out the work prior to beginning of construction and establishing grades for all roads to maintain positive drainage when the profile of the road is altered. The Contractor shall initiate a Request for Information to the Engineer for review if any changes to the existing road profile are to be made. The Contractor shall provide elevations to the Engineer in order to evaluate the effect of grade changes to the adjacent driveways, sidewalks, and residential lots. The Contractor shall submit a detailed sketch to the Engineer that shows existing roadway elevations and the proposed gutter line. This effort shall consist of adjusting catch basins or drop inlets as the low points of this profile. Any change to the existing road profile shall be approved by the engineer and DPW prior to making any changes. The Engineer shall review and approve the proposed gutter line to assert that the road is laid out adhering to City Standards. Any changes made to the existing road profile without the City's approval may be rejected and replaced at the Contractor's expense.

B. Prior to starting construction in each block, the Contractor shall be required to mark using survey marking paint the limits of the pavement, driveway, sidewalk, and handicapped ramp removal as shown on the plans, and mark using a contrasting color any areas the contractor recommends as additional removal/replacement due to constructability concerns.

C. There shall be no direct payment for Construction Layout. All costs associated with the requirements included in Section C740 of the General Specifications shall be included in other major items of the proposal.

### **SECTION 3.05 – TRAFFIC CONTROL PLAN**

The requirements of General Specifications Section C128 PERMITS AND REGULATIONS shall apply except a detailed traffic control plan shall be required for this project.

A. The Contractor shall maintain fifty (50%) percent of the roadway accessible to vehicular traffic at all times, and for major streets shall maintain 100% of roadway accessible to vehicular traffic between the hours of 7-9 A.M. and 4-6 P.M. A traffic control plan indicating, in detail, the location of all signs, lights, and barricades must be prepared by the Contractor for the written approval of the Director, no less than two, nor more than ten working days in advance of implementation. It shall be the Contractor's responsibility to obtain these approvals in writing. There is no direct pay for this requirement.

B. The Police Department, Fire Department, all affected utilities as well as any and all residents and/or businesses affected must be informed a minimum of twenty-four (24) hours in advance of anticipated closures and the duration thereof.

C. Construction traffic control signs, barricades, warning lights, devices, and methods, shall comply with Part VI of Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) unless otherwise directed by the Director. There is no direct pay for this.

D. All traffic control devices (roadway markings, signs, signals, signal controls, etc.) destroyed as a result of construction shall be replaced at the Contractor's expense.

E. The Contractor shall notify the Director immediately if the project requires changes or modifications to existing traffic control signs, parking meters, etc.

The Contractor performing work under this contract shall be required to coordinate and cooperate in scheduling his operations with the Director and S&WB prior to finalizing pavement repairs to accommodate other contractor's activities. There shall be at no direct payment for traffic control plans.

### **SECTION 3.06 – SAW CUTTING (SIDEWALK, DRIVEWAY AND CURBS)**

A. This item shall be governed by the requirements of General Specification Item C202 (55) except as modified here-in. To ensure against ragged connections between old and new work, saw cutting will be required at sidewalks, driveways, curbs, and/or at other paved construction areas as may be designated by the Engineer.



B. The saw cuts in sidewalks shall be full depth with an appropriate saw to ensure the straight vertical edge for the upper portion on the patch. After the edges have been cut, the areas to be removed are broken in small pieces with pneumatic chisels or drills and the pieces removed. The resulting broken edge of the concrete below the saw cut is left fairly rough and irregular but in approximately vertical plane so that it will provide aggregate interlocks between the patch and existing concrete. Joints and typical joint spacing within the repair area shall be established or reestablished in accordance with the details shown on City of New Orleans Department of Public Works Standard Drawings.

The saw cuts in driveways and curbs shall be full depth with an appropriate saw to ensure the straight vertical edge for the upper portion on the patch. After the edges have been cut, the areas to be removed are broken in small pieces with pneumatic chisels or drills and the pieces removed. The resulting broken edge of the concrete below the saw cut is left fairly rough and irregular but in approximately vertical plane so that it will provide aggregate interlocks between the patch and existing concrete. When breaking the concrete driveway pavement an attempt shall be made to save a minimum twelve (12) inches of the existing welded wire fabric on each side.

Joints and typical joint spacing within the repair area shall be established or reestablished in accordance with the details shown on City of New Orleans Department of Public Works Standard Drawings.

C. Measurement and payment for saw cutting required to establish joints interior to the work area as required by the DPW Standard Details and General Specifications shall not be allowed.

D. Measurement and payment for saw cutting of sidewalks, driveways, or curbs along the ends or perimeter of removal areas as required to protect existing concrete that is to remain in-place shall be made at the unit price bid per linear foot for Special Bid Item No. CF-3 SIDEWALK, DRIVEWAY AND CURB SAW CUTTING when listed on the Unit Price Form.

E. There shall be no Measurement and payment for the depth of saw cutting of sidewalks, driveways, or curbs along the ends or perimeter of removal areas. The depth of saw cutting shall follow the plan drawings regarding the pavement section thickness.

### **SECTION 3.07 – PAVEMENT SAW CUTTING ADJACENT TO EXISTING PAVEMENT AND AT PATCHES AND UTILITY TRENCHES**

A. This item shall be governed by the requirements of Standard Specification Item C202 (56) except as modified here-in. The cut in roadway pavement adjacent to existing pavement that is to remain in place, and for patching, and for utility trenches shall be made prior to demolition of the paved area to be removed and shall be sawcut full pavement depth to ensure the adjacent paved areas that are to remain in place are protected from damage during the demolition process. If the contractor damages the edge of sawcut pavement the contractor shall be required to re-sawcut the entire concrete panel, or as approved by the engineer, to remove the damaged area. Any saw cutting, pavement, and related items that are required due to Contractor damage of existing pavement shall be at no direct cost.

B. This item shall include saw cutting for both Portland cement concrete and asphaltic concrete pavement along the ends or perimeter of removal areas as required to protect existing pavement that is to remain in-place. The pavement saw cut, assuming a full pavement-depth saw cut up to a 10” maximum depth, shall be made with an appropriate saw to ensure the straight vertical edge for the upper portion on the patch. After the edges have been cut, the areas to be removed shall be broken in small pieces with pneumatic chisels or drills and the pieces removed.

C. Measurement and payment for saw cutting required to establish or reestablish contraction and expansion joints interior to the work area as required by the DPW Standard Details and General Specifications shall not be allowed.

D. Measurement and payment for saw cutting existing pavement along the ends or perimeter of removal areas adjacent to patches and utility trenches shall be made at the unit price bid per linear foot for Special Bid Item No. CF-4 PAVEMENT SAW CUTTING ADJACENT TO EXISTING PAVEMENT AND AT PATCHES AND UTILITY TRENCHES when listed on the Unit Price Form.

**SECTION 3.08 - REMOVAL OF ADA-ACCESSIBLE RAMPS, CURB AND GUTTER, AND CONCRETE SIDEWALKS AT INTERSECTIONS INCLUDING SAW CUTTING**

A. This item shall be governed by the requirements of Standard Specification Item C202 except as modified here-in. The unit price bid per Square Yard for this item shall include all saw cutting of curb, curb and gutter bottom, sidewalk, and pavement, removal and proper disposal of existing pavement, curb, curb and gutter bottom, sidewalk, ramps, and curb transitions, including all excavation, associated with handicapped ramp removal and at the locations shown on the plans.

B. Measurement and payment for Handicap Ramps and Concrete sidewalks at intersection shall be made at the unit price bid per square yard for Special Bid Item No. CF-5 REMOVAL OF HANDICAPPED RAMPS, CURB AND GUTTER, AND CONCRETE SIDEWALKS AT INTERSECTIONS INCLUDING SAW CUTTING when listed on the Unit Price Form.

**SECTION 3.09 - ADA-ACCESSIBLE CURB RAMPS, CURB AND GUTTER, AND CONCRETE SIDEWALKS AT INTERSECTIONS**

A. This item shall be governed by the requirements of General Specification Item C706 (54) except as modified here-in. Concrete sidewalks at intersection shall include the handicap ramp Type B as detailed on the Construction Documents, and the latest ADA standards, unless otherwise approved by the Director in writing on a case-by-case basis. Concrete shall be 3000 psi compressive strength at 28 days reinforced with 6x6 - W2.9xW2.9 reinforcing mesh weighing forty-two (42) lbs. per 100 sq. ft. placed at 2" from the top of slab.

B. Breaking out and removing existing pavement, curb, and sidewalk will be paid for under another item. Transitional sidewalk, where required, will be paid for under for under other items of the proposal.

C. Measurement and payment for Handicap Ramps and Concrete sidewalks at intersection shall be made at the unit price bid per square yard for Special Bid Item No. CF-6 ADA-ACCESSIBLE CURB RAMPS, CURB AND GUTTER, AND CONCRETE SIDEWALKS AT INTERSECTIONS, when listed on the Unit Price Form, and shall include: detectable warning surfaces, all necessary sand, backfill, concrete, transitional flares, transitional curbs, the curb with thickened section and gutter bottom, and all additional curb transitions required for ramp construction in accordance construction requirements of the Standard New Orleans DPW details.

All non-compliant ADA Handicap Ramps within the limits of construction shall be replaced with ADA compliant ramps unless otherwise approved by the Director.

Price shall include all backfill and compaction behind curb and along the edges of walk with select material obtained from roadway excavation or other approved sources and installation of the top 4 inches with batture sand for dressing and beneath sidewalks and curbs as required.

Price shall include removal and replacement of adjacent roadway pavement as required to form curb, gutter, and ramp transition areas, where adjacent pavement is not included on the drawings and quantified in other items of the proposal.

Price shall include all dowelling and transverse and longitudinal reinforcement in conformance with the Standard New Orleans DPW details.

Price for new curb or curb and gutters associated with Handicapped Ramp construction shall be measured and paid for as subsidiary to Square Yard unit price bid for ADA-ACCESSIBLE CURB RAMPS, CURB AND GUTTER, AND CONCRETE SIDEWALKS AT INTERSECTIONS.

### **SECTION 3.10 - DRIVEWAYS AND SIDEWALKS (SPECIAL FINISH)**

This work consists of furnishing and constructing specially finished concrete driveways, sidewalks, and incidental paving slabs. Special finish sidewalks and driveways in this section shall be in conformance with the requirements of C706 of the DPW General Specifications.

#### **A. SUBMITTALS**

1. Product Data: Submit manufacturer's complete technical data sheet for the following:

- a. Colored admixture.
- b. Powder antiquing release agent.
- c. Imprinting/Texturing tools.

2. Samples for initial selection: Manufacturer's color charts showing full range of colors available.

3. Pea Gravel concrete mix shall be submitted in addition to standard concrete mixes for sidewalks and driveways. Pea Gravel Mix shall be in conformance with the requirements of Section C706 of the DPW General Specifications.

#### **B. QUALITY ASSURANCE**

1. Manufacturer Qualifications: Manufacturer with 5-years experience in production of specified products.

2. Installer Qualifications: An installer with 5-years experience with work of similar scope and quality.

3. Comply with the requirements of ACI 301.

4. Obtain each specified material from same source and maintain high degree of consistency in workmanship throughout the Project.

5. Notification of manufacturer's authorized representative shall be given at least 1-week

before start of Work.

6. Integrally Colored Concrete Mockups:

7. Provide under provisions of Section "Submittals".

8. At location on Project selected by Owner and Engineer, place and finish 10 feet by 10 feet area.

9. For accurate color, the quantity of concrete mixed to produce the sample should not be less than 3 cubic yards or not less than 1/3 the capacity of the mixing drum on the ready-mix truck and should always be in full cubic yard increments. Excess material shall be discarded according to local regulations.

10. Construct mockup using processes and techniques intended for use on permanent work, including curing procedures. Include samples of control, construction and expansion joints in sample panels. Mockup shall be produced by the individual workers who will perform the work for the Project.

11. Retain samples of cements, sands, aggregates and color additives used in mockup for comparison with materials used in remaining work.

12. Accepted mockup provides visual standards for work of Section.

13. Mockup shall remain through completion of the work for use as a quality standard for furnished work. Remove mockup when directed.

C. DELIVERY, STORAGE, AND HANDLING

Colored Admixture: Comply with manufacturer's instructions. Deliver colored admixtures in original, unopened packaging. Store in dry conditions.

D. PROJECT CONDITIONS

Integrally Colored Concrete Environmental Requirements:

1. Schedule placement to minimize exposure to wind and hot sun before curing materials are applied.

2. Avoid placing concrete if rain, snow, or frost is forecast within 24-hours. Protect fresh concrete from moisture and freezing.

3. Comply with professional practices described in ACI 305R and ACI306R.

E. PRODUCTS

1. MATERIALS

a. Colored Admixture for Integrally Colored Concrete:

Admixture shall be a colored, water-reducing, admixture containing no calcium chloride with coloring agents that are lime proof and UV resistant.

b. Stamping/Imprinting Tools and Materials:

Stamping/Imprinting Tools and Materials shall be furnished by the Color Admixture manufacturer.

c. Powder antiquing release agent shall be recommended by pattern tool manufacturer and compatible with integral color additives.

2. COLORS AND PATTERNS

a. Concrete Color:

Provide cement, sand, aggregate and colored admixture as required to match existing stamped/colored concrete.

b. Curing Compound: Color to match colored concrete.

c. Surface Texture: Stamped concrete finish.

d. Stamp/Imprinting Pattern:

As required to match existing stamped driveway. The Contractor shall submit imprinting pattern to Engineer for review and approval before construction.

F. MEASUREMENT

The area of driveways will be determined by surface measurements and no extra allowance will be made for shoulders. Sidewalk pavements will be paid for by surface measurements and no deduction will be made for subsurface structures occupying less than five (5) square feet of area. Areas under structures encroaching on Public Property not paved will not be included in the surface measurement.

G. PAYMENT

Payment for special finish concrete driveways and sidewalks shall be made at the contract price per square yard, which includes excavation, installation of expansion joint and welded wire fabric. Granular material for adjustment and removal of existing driveways, sidewalk or banquette pavement shall be paid for in other items.

ITEM NO.	PAY ITEM	PAY UNIT
CF-7	4" Concrete Sidewalk (Special Finish)	Square Yard
CF-8	6" Concrete Driveway (Special Finish)	Square Yard
CF-9	6" Concrete Driveway (Special Finish) (Pea Gravel)	Square Yard

**SECTION 3.11 - SIDEWALK TRANSITION ADJACENT TO ADA-ACCESSIBLE CURB**

**01 200-41**

DIVISION 01

Version 06.05.24

## **RAMP AREAS**

A. This item shall be governed by the requirements of Standard Specification Item C706 (51) Concrete Sidewalk, C706 (57) Brick Sidewalk, and C706 (59) Stone Sidewalk except as modified herein. This item shall include all necessary work associated with transitioning line and grade of existing sidewalk and non-roadway paved transition areas adjacent to proposed handicapped ramp locations.

B. The unit price bid per Square Yard for SIDEWALK TRANSITION ADJACENT TO HANDICAPPED RAMPS shall include all saw cutting, removal and proper disposal of existing sidewalk and non-roadway paved transition areas, all excavation, subgrade preparation, setting bed, concrete foundation, grading, compaction, tamping, and furnishing and placing all necessary fill material, backfill, dressing, sand for adjustment, joints, reinforcement, grout, finishing, curing, and sidewalk or non-roadway paved transition area constructed of a material to match the existing type and surface course unless otherwise directed by the Director. Where existing sidewalk or non-roadway paved transition areas to be removed is Portland Cement Concrete the new surface course shall be 4 inches thick 3,000 psi concrete at 28 days reinforced with 6x6 - W2.9xW2.9 reinforcing mesh. Where existing sidewalk or non-roadway paved transition areas to be removed is Brick or Stone the new surface course shall be replaced in-kind and compliant with the construction requirements of the General Specifications for the type material removed. Where feasible and accepted by the Director existing salvaged material, if reusable, can be removed, properly cleaned, and re-installed. Price shall include all backfill and compaction behind curb and along the edges of walk with select material obtained from roadway excavation or other approved sources and the installation of the top four inches with Batture sand for dressing as required. The Contractor is solely responsible for coordinating with the respective utility for any required adjustments or relocations as required. If approved by the respective utility any necessary utility box adjustments shall be performed by the contractor in accordance with the appropriate standards and requirements at no direct payment.

C. When SIDEWALK TRANSITION ADJACENT TO HANDICAPPED RAMPS has been shown on the unit price proposal the extent of transition area allowable for measurement and payment shall be a maximum of 8'-0" in length in each direction from proposed handicapped ramps where existing sidewalk requires replacement to meet line and grade dictated by compliance with the latest ADA standards. The width of the sidewalk transition shall match the width of the material to be removed to meet line and grade dictated by compliance with the latest ADA standards. Locations eligible for use of this pay item shall be recommended by the contractor to the project engineer's Resident Inspector (RI) for submission to the Director of an approved amount per each location proposed. The Contractor shall consult directly with the RI and provide field measurements, recommendations, and existing and proposed grades as needed to install ADA compliant sidewalk transitions to proposed handicapped ramp locations. Only locations and extents specifically pre-approved by the Director during construction will be eligible for payment. SIDEWALK TRANSITION ADJACENT TO HANDICAPPED RAMPS shall not be considered a material part of the work contemplated, and only amounts specifically approved in writing from the Director shall be measured and paid for at the contract unit price bid with no adjustment to the unit price for an increase or decrease in the final quantity approved.

D. Measurement and payment:

1. SIDEWALK TRANSITION ADJACENT TO HANDICAPPED RAMPS, not shown on the Construction Drawings but included in the unit price proposal, shall only be measured and paid for each location and specific quantity approved in writing by the Director for Special Bid Item No. CF-13 SIDEWALK TRANSITION ADJACENT TO HANDICAPPED



RAMPS.

2. All sidewalk areas that are shown on the Construction Drawings are measured and paid for in other applicable pay items of the proposal.

## **SECTION 3.12 - ADA-ACCESSIBLE CURB RAMP RETROFIT**

### **A. DESCRIPTION**

1. This item shall include all necessary work associated with adding ADA compliant tactile / detectable warning surface tiles to existing curb ramps. This Section includes Specifications for furnishing and installing Surface Applied Tactile / Detectable Warning Surface Tiles (SA) in an inline truncated dome pattern on all curb ramps and walking surfaces at the locations and to the dimensions shown on the Drawings, in accordance with the Contract Documents and as directed by the Director. (Surface Applied Tactile is also known as Surface Mount Tactile Warning Tiles or Retrofit Tactile Warning Tiles).

### **B. RELATED DOCUMENTS**

1. Drawings and general provisions of the Contract Documents.
2. Americans with Disabilities Act (ADA) Title 49 CFR Transportation, Part 37.9 Standards for Accessible Transportation Facilities, Appendix A, Section 4.29.2 Detectable Warnings on Walking Surfaces. FHA Memo (5-06-02) titled Truncated Domes. Federal Register Volume 71, No. 209, 49 CFR Part 37 (10-30-06), ADA Standards for Transportation Facilities (11-29-06, DOT): Sections 406, 705, and 810. ADA Standards for Accessible Design – 2010 (9/05/11, DOJ), ADAAG: Sections 705 and 810. Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Rights of Way (7/23/11, Access Board), PROWAG: Sections R208, R304, R305, R308, and R309.
3. American Society for Testing and Materials (ASTM) Test Methods B117, C501, C1028, D543, D570, D638, D695, D790, G151, G155, and E84.
4. American Association of State Highway and Transportation Officials (AASHTO): Test Method AASHTO-H20

### **C. SUBMITTALS**

1. Product Data: Submit manufacturer's literature describing products, installation procedures and maintenance instructions.
2. Samples for Verification Purposes: Submit two (2) Tactile Warning Surface samples minimum 8" x 8" of the kind proposed for use. Samples shall be properly labeled and shall contain the following information: Name of Project, Submitted by, Date of Submittal, Manufacturer's Name, and Catalog Number.
3. Shop Drawings: Submit Standard Manufacturer Shop Drawings showing all pertinent characteristics of the Surface Applied Tactile Warning Tile (SA) including profile, sound on cane contact amplification feature, fastener locations and installation

methods.

4. Material Test Reports: Submit current test reports from qualified, accredited independent testing laboratory in accordance with ASTM guidelines and indicating that materials proposed for use are in compliance with specification requirements and meet the properties indicated. All test reports submitted shall be representative of the Surface Applied Tactile Warning Tile (SA) delivered to the Project.
5. Maintenance Instructions: Submit copies of manufacturer's specified maintenance practices for each type of Tactile Warning Surface Tile and accessory.

#### D. GUARANTEE

1. SA Tiles shall be guaranteed in writing for a period of five (5) years from date of Contract's final completion. The guarantee includes manufacturing defects, breakage, and deformation.

#### E. MATERIALS

1. Composition: SA Tiles shall be manufactured using a matte finish exterior grade homogeneous (uniform color throughout thickness of product) glass and carbon reinforced polyester based Sheet Molding Compound (SMC) composite material. Truncated domes must contain fiberglass reinforcement within the truncated dome for superior structural integrity and impact resistance. A matte finish will be required on the Tactile Warning Surface for superior slip resistance performance superior to that offered by a gloss finish. Use of Tactile Warning Surface Products employing coatings or featuring layers of material with differing composition, performance, or color properties is expressly prohibited under this Section.
2. Color: Color shall be homogeneous throughout SA Tile, Dark Gray (G) per Federal Standard 595B Table IV, Color No. 36118.
3. Domes: Square grid pattern of raised truncated domes of 0.2" nominal height, base diameter of 0.9" and top diameter of 0.45". The Federal Code of Regulations permits a truncated dome spacing range of 1.6"-2.4." For superior wheelchair, walker and shopping cart mobility, the preferred truncated dome spacing shall have a center-to-center (horizontally and vertically) spacing of 2.35", measured between the most adjacent domes on square grid.
4. Configuration: SA Tile sizes shall be as indicated on the Contract Drawings. The field area shall consist of a non-slip textured surface with a minimum static coefficient of friction of 0.80, wet and dry. At a minimum, the thickness of the body of SA Tile shall measure 3/16" (nominal). The SA Tile thickness shall not exceed 1/2" maximum when measured from the curb ramp surface to the top of the truncated dome. The field area shall consist of a non-slip textured surface with a minimum static coefficient of friction of 0.80, wet and dry.
5. In compliance with the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Rights of Way (7/23/11, Access Board, "PROWAG") Section R302.7.2 and California Code of Regulations (CCR 2007) Section 1127B.5.5 and Section



1133B.8.5, the Composite Tactile Warning Surface Tiles shall have a perimeter beveled edge with a maximum slope of 1:2 in order to minimize the potential for a pedestrian tripping.

6. Radius SA Tile:
  - a. Radius SA Tile measures 24"x 33.25" and features reverse score lines on each 24" dimension for a 10', 15', and 20' radius condition. The Radius SA Tile out of the box measures 11' - 6" radius.
  - b. Truncated domes feature proper dome alignment for a radius application. Radius SA Tile shall be cut to the appropriate configuration using the reverse score lines as a guide.
7. Follow Tactile Warning Surface Manufacturer's installation procedures.
8. Dimensions: SA Tiles shall be held within the following dimensions and tolerances:
  - a. Length and Width:
    - i. Rectangular SA Tile: 2.35" Dome Spacing
    - ii. Radius SA Tile: 1.6" - 2.4" Dome Spacing
9. Fasteners: The Tactile Warning Surface Tile shall have minimum twelve (2'x3' Tactile Warning Surface Tile) to twenty-four (3'x5' Tactile Warning Surface Tile) countersunk fastening holes. Color matched, stainless steel 304, flat head drive anchor: ¼" diameter x 1 1/2" long.
10. Adhesive:
  - a. Polyether Structural Adhesive/Sealant by Chem Link (M-1)
  - b. Urethane Elastomeric Adhesive by Bostik (Hydroment Ultra-Set Advanced or Durabond D-818)
  - c. Approved equal.
11. Sealants:
  - a. Single Component Urethane Sealant:
    - i. Sources: BASF NP1 by BASF Building Systems or Sikaflex 1A by Sika Corp.
    - ii. Colors: Black, Limestone, Redwood Tan
  - b. Polyether Structural Adhesive/Sealant by Chem Link (M-1)
    - i. Colors: Black, Gray, Limestone, White

- c. Approved Equal
12. Available manufacturers, subject to compliance with these Specifications include, but are not limited to, the following:
- a. ADA Solutions Inc. of Chelmsford, MA (Phone: 800-372-0519, Fax: 978-262-9125, Web Site: [www.adatale.com](http://www.adatale.com), Email: [info@adatale.com](mailto:info@adatale.com), or owner approved equal.

## F. EXECUTION

### 1. Preparation

- a. Transmit submittals and deliverables required by this Section.
- b. Furnish products as indicated.
- c. Substrate Condition: Ensure substrate is in suitable condition, and in compliance with the Tactile Warning Surface manufacturer recommendations, to receive work of this Section. Prior to construction, refer any and all discrepancies to the Engineer for further action.

### 2. Installation

- a. Contractor will not be allowed to install Tactile Warning Surface Tiles until all submittals have been reviewed and approved by the Engineer.
- b. SA Tile shall be installed per manufacturer's instructions.
- c. To the maximum extent possible, the SA Tiles shall be oriented such that the rows of in-line truncated domes are parallel with the direction of the ramp. When multiple SA Tiles regardless of size are used, the truncated domes shall be aligned between the tactile warning surface tiles and throughout the entire tactile warning surface installation.
- d. In accordance with the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Rights of Way (7/23/11, Access Board): Sections 304 + 305), Tactile Warning Surface Tile shall be located relative to the curb line as shown within Sections 304+305 of the Guidelines.
- e. Cutting of SA Tiles may be required to accommodate specific site conditions. All possible attempts shall be made to minimize cutting of the SA Tiles. Minimum acceptable width of the cut SA Tile shall be 9".
- f. Environmental Conditions: Air and substrate temperatures must exceed 40 degrees for at least 8 daytime hours for a sound and proper installation. A "weed torch" may be used to boost the substrate temperature to expedite cure of adhesives and sealants.
- g. Immediately prior to installing the SA Tiles, the concrete surfaces must be

inspected to ensure that they are clean, dry, free of voids, curing compounds, projections, loose material, dust, oil, grease, sealers and determined to be structurally sound with a minimum four (4) day concrete cure period (unless otherwise directed by the SA Tile manufacturer) and that the surface is flat. As necessary, substrate may be mechanically cleaned with a diamond cup grinder or shot blaster to remove any dirt or foreign material although a broom or leaf blower is usually adequate for cleaning of the substrate.

- h. Apply adhesive on the backside of the SA Tiles following the perimeter border and internal cross pattern established by the SA Tile manufacturer. Sufficient adhesive must be placed on the prescribed areas to have full coverage across the 2-inch width of the adhesive locator.
- i. Set the SA Tile(s) true and square to the curb ramp areas as detailed in the Drawings. Allow 1/8" separation between successive SA Tiles for expansion/contraction.
- j. Drill holes true and straight to a depth of 2" by 1/4" using the recommended bit. As necessary, additional countersunk holes may be added to the SA Tile by using a 5-point 1/2" (82 degree) countersink to create the necessary holes.
- k. Mechanically fasten SA Tile to the concrete substrate using a 32oz. to 48oz. hammer to set the composite sleeve anchors. Ensure that the fastener has been set to full depth, straight and true. Care should be taken when setting the fastener to avoid any advertent blows with the hammer to the SA Tile.
- l. Following the installation of the SA Tile, the sealant system should be applied to the perimeter edge. Follow the Tactile Warning Surface manufacturer's recommendations when applying the sealant in a cove type profile to blend and seal the SA Tile edge to the adjoining surfaces.
- m. Do not allow foot traffic on installed SA Tile until the perimeter edge sealant has cured sufficiently to avoid tracking. If the SA Tile must be placed into immediate pedestrian service, apply baby powder to the sealant to minimize the possibility of tracking while the sealant cures. Foot imprints may appear in the fully cured sealant application
- n. A Urethane Sealant such as Sikaflex 1a or BASF NP1 shall be applied to the edge treatment for a watertight Tactile Warning Surface Tile installation.

### 3. Cleaning and Protecting

- a. Protect SA Tiles against damage during construction period to comply with SA Tiles manufacturer's Specifications.
- b. As necessary, while the Project remains under construction, protect SA Tiles against damage from rolling loads following installation by covering with plywood or hardwood.
- c. If requested by the Director, clean SA Tiles not more than four (4) days prior

to date scheduled for inspection intended to establish date of substantial completion in each area of project. Clean SA Tile by method specified by Tactile Warning Surface Products manufacturer.

**G. MEASUREMENT AND PAYMENT**

1. When the Surface Applied Tactile / Detectable Warning Surface Tiles pay item has been shown on the unit price proposal the final approved quantity for installation, measurement, and payment shall be determined by and subject to written approval of the Director and shall not be considered a material part of the work contemplated. Only locations specifically approved in writing by the Director during construction shall be measured and paid for at the unit price bid with no adjustment to the unit price for an increase or decrease in the final amount approved.
2. The unit price bid per square foot for Surface Applied Tactile / Detectable Warning Surface Tiles shall include all cost to prepare, furnish, install, clean, protect and warrant the tiles in accordance with the specifications and the manufacturer's recommendations.
3. Surface Applied Tactile / Detectable Warning Surface Tiles shall be measured based on approved actual square footage of installed final product in-place.
4. Surface Applied Tactile / Detectable Warning Surface Tiles, not shown on the Construction Drawings but included in the unit price proposal, shall only be measured and paid for at location approved in writing by the Director for Special Bid Item No. CF-14 SURFACE APPLIED TACTILE / DETECTABLE WARNING SURFACE TILES.

**SECTION 3.13 - CONCRETE PAVEMENT (8" THICK)**

A. This item shall be governed by the requirements General Specification Item C601 except as modified here-in.

B. The final finish and texture shall be obtained using a broom, or other acceptable methods approved by the Director, in accordance with the latest edition of LaDOTD Louisiana Standard Specifications for Roads and Bridges Section 601.

C. At all locations proposed concrete pavement abuts existing concrete pavement that is to remain in place:

All concrete pavement within the designated area is to be removed and the subgrade area prepared to receive an eight (8") inch compacted crushed stone base course as shown on the typical roadway cross sections contained in the Construction Drawings. Compacted pumped sand covered by a geotextile fabric as required shall be used to bring subgrade to the required elevation. It shall also be used to replace unsuitable subgrade or to fill voids as directed.

No. 5 (#5) dowels 24" long at 12" on center shall be drilled and epoxy grouted into the existing concrete to allow for a proper tie-in.

Just prior to placing the new concrete, the vertical faces of the old concrete pavement are to be coated with an approved concrete epoxy per ASTM C 881 Type II. The new roadway pavement shall

consist of four thousand (4,000) psi P.C.C.P. reinforced with 6 X 12 - W 7.5 X W 6.5 welded wire fabric, seventy-seven (77) pounds per one hundred (100) square feet. The new mesh shall be tied to the existing mesh where possible. Full width sheets are to be used and overlapped a minimum of 12", no partial or scrap pieces are to be used.

Wherever a joint (any type) or a part thereof falls within the affected area, the same shall be reestablished in kind and shall be incidental to the work included as concrete pavement.

After all roadway pavement repairs have been completed at a location, Bituminous Wearing Course material, if required, shall be placed in a continuous operation.

D. Unit Price bid shall include all preparation work and drilling and dowelling between existing and proposed pavement in accordance with the CONCRETE PAVEMENT REPAIR detail shown on City of New Orleans Department of Public Works Standard Drawing STD5, except epoxy grout shall also be required.

E. Measurement and payment for concrete pavement shall be made at the unit price bid per square yard for Bid Item No. C601 (54) REINFORCED CONCRETE PAVEMENT (8" THICK) when listed on the Unit Price Form.

### **SECTION 3.14 - ROOT PRUNING, TREE PROTECTION, LANDSCAPING, AND SIDEWALK GRAVEL BED**

Landscaping shall be in accordance with Section C719 of the General Specifications for Street Paving Department of Public Works 2015 Edition (Revised 11/05/2015), Department of Parks and Parkways Specifications Section 02480 *Landscape Protection During Construction*, 02481 *Installation of Plant Materials* and Section 02485 *Seeding and Sodding*, and amended as follows:

A. Root Pruning – All tree roots, of City owned trees, damaged during removal of curbs, sidewalks and driveways shall be root pruned. All tree roots damaged during any excavation operations; yard drains, collector lines, etc. shall be root pruned. Tunneling and boring shall be required when working within the critical root zone. Trenching is prohibited from this area. Air spading may be required in order to reveal the roots under circumstances where construction occurs within the critical root zone as directed by the Parks & Parkways Department (PPD) arborist.

1. Air spading requirement - When working within the critical root zone, air spading is required to expose the top seven to ten inches of the critical root zone to reveal root conflicts.
2. Aerial pruning requirement – When root pruning occurs, aerial pruning is required as per the direction of the Chief Urban Forester to mitigate damage by reducing the canopy in proportion to the root reduction.
3. Lac Balsam is prohibited from use to dress severed roots as a tree wound treatment.
4. A living root that will be buried below grade following pruning shall be treated with a rooting hormone approved by the Chief Urban Forester.
5. A root flare that must be cut and remain exposed shall be treated with a copper paste approved by the Chief Urban Forester.
6. All root pruning shall occur prior to excavation.
7. When circumstance require that roots be exposed for more than 48 hours, the roots shall be re-cut to living tissue, re-treated, buried and irrigated promptly.
8. Approved root cutting tools – Sharp instruments that make clean cuts, including hand saw, loppers, snips or hand pruners, chain saw or reciprocating saw with unpainted blades. Dull blades are prohibited. Trenchers and excavators are prohibited.

B. Fertilization – All trees’ roots pruned due to construction shall be fertilized using a water-soluble fertilizer injected into the soil. The fertilization plan shall be based upon soil lab test reports furnished by the Contractor. The minimum acceptable N-P-K ratio shall be 30-5-5. The nutrient complex and ratio (gal. /sq. ft.) must be approved by the Urban Forester overseeing the project.

C. Mycorrhizal Fungal Inoculate – Treatment equal to or better than Mycor Tree Saver, Cambistat, and mulching shall be applied to all construction damaged tree root zones per manufacturer’s directions. Cost shall be included in the bid price for root pruning.

D. Termite Treatment – All tree roots pruned due to construction shall be treated for termites. A termiticide equal to or better than Premise manufactured by Bayer Corporation shall be used per manufacturer’s directions. Cost shall be included in the bid price for root pruning.

E. Tree Permit Requirements – When necessary, the Contractor will be required to obtain a Tree Permit from the Department of Parks and Parkways.

1. Pre-Permit: In order to obtain a tree permit, the Contractor must satisfy the following conditions:

- The Contractor will ensure that the tree permit application will be made by a Louisiana Licensed Arborist certified by the International Society of Arboriculture
- A signed contract and a written detailed plan are required for issuance of the permit. The plan shall include the location of the proposed excavation, measurements of depth, length, and proximity to the main trunk of the tree, tools and methodology and exact time when work will be performed.

2. Post-Permit: Once PPD approves the tree permit, the Contractor must ensure the following on-going requirements are met:

- The Contractor will ensure that the Arborist is present on the construction site for all excavation and/or root pruning within protected areas of the tree.
- The Contractor will ensure that the Arborist visits the construction site for a minimum of one hour per day during active construction that is near to or involves trees.
- The Contractor will ensure that the Arborist will submit a weekly log of hours to the Chief Urban Forester with each invoice.

F. Canopy Pruning – When aerial pruning occurs, the resulting canopy shall be symmetrical and balanced as per the direction of the Chief Urban Forester.

G. Tree Replacement – Trees determined by the Chief Urban Forester to no longer be viable due to damage inflicted by the Contractor shall be replaced as directed by the Department of Parks and Parkways. At a minimum, trees shall be replaced on the basis of inch caliper per inch diameter lost. In the event that there is not sufficient space for planting, an alternative location may be designated off site, or the Contractor may donate a sum equal to the cost of replacement to the Department of Parks and Parkways Plant-A-Tree Trust Fund.

H. Tunneling and Boring Requirement – When work cannot be redirected away from the Critical Root Zone, tunneling and boring is required for the installation of lines. Trenching is prohibited within the critical root zone. Air spading may be required in order to reveal the roots under circumstances where construction occurs within the critical root zone as directed by the Chief Urban Forester.

- I. Root Barrier – When work includes installation of root barrier, the barrier may not be constructed from wood.
- J. Restricted Use Instruments – Permission must be obtained from the Chief Urban Forester in advance for use of any machines intended for trenching or mechanical digging. When stump grinders are employed, it must be followed by the use of an approved cutting instrument that will remove any torn or shredded tissue back to a clean, living cut.
- F. These items shall be governed by the requirements of General Specification Item C719 except as modified here-in.
- G. When Root Pruning has been shown on the unit price proposal the extent of root pruning allowable shall be determined by the Parks & Parkways Department (PPD) and require written approval by the Director. The Contractor shall consult directly with the PPD and provide a licensed arborist as needed to perform root pruning. Only root pruning locations specifically approved by the Director during construction will be eligible for payment. Root Pruning shall not be considered a material part of the work contemplated, and only Root Pruning locations specifically approved in writing from the Director shall be measured and paid for at the unit price bid with no adjustment to the unit price for an increase or decrease in the number of items approved. Measurement and payment for Root Pruning shall be made for each approved location at the unit price bid per each tree for Special Bid Item No. CF-10 ROOT PRUNING. When Root Pruning has not been shown on the unit price proposal then any required Root Pruning shall be at no direct payment.
- H. There shall be no direct payment for Root Trenching. The Contractor is responsible for protecting existing trees in and adjacent to the work area and installing tree protection measures as required by Parks and Parkways and as directed by the engineer. All costs associated with Root Trenching shall be included in other major items of the proposal.
- I. There shall be no direct payment for tree protection. The Contractor is responsible for protecting existing trees in and adjacent to the work area and installing tree protection measures as required by Parks and Parkways and as directed by the Director. All costs associated with tree protection shall be included in other major items of the proposal. Tree protection shall be in place and approved by the PPD arborist prior to commencement of any work on site, including clearing and grubbing.
- J. There shall be no direct payment for Sidewalk Gravel Bed as required for ramping over tree roots that interfere with placement of sidewalk. The Contractor is responsible for protecting existing trees in and adjacent to the work area and installing tree protection measures as required by Parks and Parkways and as directed by the engineer. All costs associated with Gravel Bed and Filter Cloth over Tree Roots shall be included in other major items of the proposal.
- K. There shall be no direct payment for Tree Trimming required to obtain needed clearance to perform the work. The Contractor is responsible for protecting existing trees in and adjacent to the work area and installing tree protection measures as required by Parks and Parkways and as directed by the engineer. All costs associated with Tree Trimming shall be included in other major items of the proposal. There shall be no direct payment for air spading and tunnel and boring required to work within the critical root zone as directed by the PPD arborist.



### **SECTION 3.15 - GRANULAR MATERIAL AND FILL MATERIAL**

A. Granular material shall be governed by the requirements of Standard Specification Item C723 except as modified here-in. The Contractor shall be responsible for importation and placement of granular fill material as required for placement of timber or concrete curb and structures. There shall be no direct payment for Granular Material or Batture Sand. Payment for Item C723 Granular Material item no. C723 (52) Batture Sand for Dressing, Granular Material for other Adjustments shall not be allowed. All costs for Batture Sand for Dressing, Granular Material for other Adjustments shall be included in the unit price bid for curbs, sidewalks, or driveways, roadways, or other major items of the proposal as applicable.

B. Fill material shall be required as fill, backfill or dressing material to ensure positive drainage within the limits of the area disturbed by construction, areas adjacent to sidewalk or driveway repairs, and between sidewalk repairs and the roadway to comply with the typical roadway cross sections shown on the plans or as directed. The fill material shall be suitable on-site excavated earth material, subject to approval of the Director, or borrow material compliant with the requirements Standard Specification Item C723 Granular Material with subsection 1003.07 referencing 2006 Edition LaDOTD Standard Specifications for Roads and Bridges. Fill and borrow materials shall be free from waste, rubbish, large rocks, or other unsuitable or foreign material.

Suitable excavated material is to be used if available as fill or dressing to comply with the typical roadway cross sections shown on the plans. In the absence of a sufficient amount of suitable on-site material the Contractor shall provide and import borrow material. There shall be no direct payment for Fill Material. All costs associated with furnishing, hauling, storing, placement and compaction of material used as fill, backfill, or dressing in accordance with the typical sections or as required to ensure positive drainage shall be included in the unit price bid for curbs, sidewalks, or driveways, roadways, or other major items of the proposal as applicable.

### **SECTION 3.16 - CATCH BASIN AND MANHOLE REPAIRS AND VERTICAL ADJUSTMENTS**

A. This work consists of the replacement of components and repair or vertical adjustment of vertical catch basins, mountable catch basins, drop inlet catch basins, and drain manholes as described and in accordance with the details, dimensions, and grades shown on plans or as directed by the Director. These items shall be governed by the requirements of the latest addition of standard Sewerage and Water Board New Orleans (SWBNO) drawings for the type of structure described and Standard Specification Item C702 except as modified herein. When Catch Basin and Manhole Repairs and Adjustments pay items have been shown on the unit price proposal the final approved quantity for installation, measurement, and payment shall be determined by and subject to written approval of the Director and shall not be considered a material part of the work contemplated. Only locations specifically approved in writing by the Director during construction shall be measured and paid for at the unit price bid with no adjustment to the unit price for an increase or decrease in the number of items approved.

B. Measurement and payment for Catch Basin and Manhole Repairs and Vertical Adjustments items shall be made at the unit prices bid under Special Bid Item Numbers CF-301 through CF-378 for Vertical Catch Basin, Drop Inlet Catch Basin, Mountable Catch Basin, and Drain Manhole in conjunction with Cover or Grate; Frame; Front Grate; and Repair or Vertical Adjustment of Single or



Double Basins or Manhole Reusing Existing Metal Castings or Repair or Vertical Adjustment of Single or Double Basins or Manhole Brick Work Only, for each type of Special Bid Item. Measurement shall be per each or per foot height, as specified for each type of repair or vertical adjustment item.

C. Unit prices bid for Catch Basin and Manhole Repairs and Vertical Adjustments items shall include any related preparation and finishing work, all excavation, soil and debris removal and proper disposal, sheeting, shoring, bracing, bedding material, granular backfill, backfill and compaction, cement, mortar, sealants, fabric, shagging, materials, castings, transitions to match adjacent improvements, protection and restoration of adjacent areas, labor and workmanship required to provide each individual repair or adjustment as described. All required removal and replacement of adjacent improvements and any damage caused by the contractor to the bordering roadway, adjacent non-paved area, sidewalk, driveway, ramp, curb, existing structure or components, or other existing assets shall be considered incidental to the unit price paid for the Catch Basin and Manhole Repairs and Adjustments items and the contractor shall be required to replace improvements or repair the damages to comply with SWBNO and DPW approved standards at no direct pay. Each Catch Basin and Manhole Repairs and Adjustments pay item may be required individually, or in combination with other Catch Basin and Manhole Repairs and Adjustments pay items, but the unit price bid shall prevail for each item individually.

D. Vertical Catch Basin items - At no time is a vertical catch basin is to be installed in a driveway, in the event that an existing vertical catch basin is located in the face of a drive apron within project limits and the scope of adjacent work includes full depth restoration, the catch basin will need to be converted to a mountable catch basin conforming SWBNO Std. Drawing No. D-3431-A. Curb inlet type vertical catch basins shall conform to the requirements shown on SWBNO Standard Drawings D-873 and D-873A for single or double vertical catch basins, except:

CF-301 Vertical Catch Basin Cover

Work to provide and install Catch Basin Cover shall include furnishing and installing a cover on the catch basin existing frame. Catch Basins shall receive new covers made of fiberglass material sized to properly to fit flush in the existing metal frame. Fiberglass covers for Catch Basins shall be Grate Glass "M" Solid Composite Plate by Road Masters International or approved equal and shall meet AASHTO M 306 or HS-20 loading requirements. This work will include removing the damaged/missing cover as identified by the Director, cleaning the existing frame, and to fit/retrofit a new cover in the existing frame, measured per each Vertical Catch Basin Cover.

CF-302 Vertical Catch Basin Frame

Catch Basin frames shall meet AASHTO M 306 loading requirements and shall be of the proper size and installed to meet the requirements of the SWBNO drawings for the type of catch basin repaired. This work will include removing the damaged/missing cover and frame and to fit/retrofit a new frame to the structure including incidental removal and replacement of the bordering roadway and cleaning and reinstallation of the existing salvaged cover or in conjunction with a new cover pay item(s) as directed by the Director. Work and materials for Catch Basin Frame includes the removal of the existing cover and frame as necessary and furnishing and installing a new frame including all components and any related preparation or finishing work to the basin for the new frame installation, measured per each Vertical Catch Basin Frame.

If no structural repair or vertical adjustment work is required, then Vertical Catch Basin Frame placement shall include any incidental brick and mortar work required for the installation of the frame. If structural repairs or vertical adjustment are required, then the Vertical Catch Basin Frame pay item may be used in conjunction with other pay item(s) for repair or vertical adjustments. The Director will have sole authority in determining whether structural repairs or vertical adjustments are required.

CF-303 Lockable Vertical Catch Basin Frame and Cover

Work to provide and install Lockable Catch Basin Frame and Cover shall include furnishing

and installing the frame and cover on an existing Catch Basin. Lockable Catch Basin Frame and Cover shall conform to East Jordan Iron Works, INC. V-4300-7 or approved equal. Item installation requirements shall follow CF-302 description. CF-303 Lockable Vertical Catch Basin Frame and Cover will be measured per each.

- CF-311 Vertical Catch Basin Front Grate No. 1,
- CF-312 Vertical Catch Basin Front Grate No. 2, and
- CF-313 Vertical Catch Basin Front Grate No. 3

No. 1, 2, or 3 Catch Basin Front Grate shall meet AASHTO M 306 or HS-20 loading requirements. This work will include removing the damaged/missing grate and to fit/retrofit a new grate to the structure including incidental removal and replacement of the bordering roadway and cleaning and reinstallation of the existing salvaged frame and cover, or in conjunction with a new frame and/or cover pay item(s) as directed by the Director. Work and materials for Catch Basin Front Grate includes the removal and reinstallation of the existing cover and frame if necessary, and removal of the existing front grate and furnishing and installing a new front grate including and all components and any related preparation or finishing work to the basin for the new grate installation, measured per each Vertical Catch Basin Front Grate No. 1, 2, or 3. If no structural repair or vertical adjustment work is required then Catch Basin Front Grate placement shall include any incidental brick and mortar work required for the installation of the grate. If structural repairs or vertical adjustments are required, then the Catch Basin Front Grate pay item may be used in conjunction with other pay item for repair or vertical adjustments. The Director will have sole authority in determining whether structural repairs or vertical adjustments are required.

- CF-315 Single Vertical Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings, and
- CF-316D Double Vertical Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings

Work to repair or provide vertical adjustment of catch basin reusing existing metal castings shall consist of: remove and salvage the existing frame and cover, or frame, cover and grate, remove all of the existing brick and mortar structure to the lowest elevation of brick area requiring repair or adjustment, furnish and install new brick and mortar courses matching the existing size and location of the original structure, and clean and reinstall the salvaged frame and cover, or frame, cover and grate, measured per each.

- CF-317 Single Vertical Catch Basin Repair or Vertical Adjustment Brick Work Only, and
- CF-318D Double Vertical Catch Basin Repair or Vertical Adjustment Brick Work Only

Work to repair or provide brick work only for vertical adjustment of Vertical Catch Basins shall consist of removing all or a portion of the existing brick and mortar structure down to the lowest brick course elevation requiring repair and furnishing and installing new brick and mortar courses matching the existing size and location of the original structure, measured per each. Vertical Catch Basin Repair or vertical Adjustment Brick Work only shall be used in conjunction with a pay item for installing a new frame and/or a pay item for installing a new front grate.

E. Drop Inlet Catch Basin items - Drop inlet type Catch basins shall conform to the requirements shown on SWBNO Standard Drawings D-3264 for Standard 24"x30" Clear Opening Drop Inlet Catch Basins, except:

- CF-331 Drop Inlet Catch Basin Grate

Work to provide and install Drop Inlet Catch Basin Grate shall include furnishing and installing a grate on the drop inlet catch basin existing frame. Drop Inlet Catch Basins shall receive new grates made of fiberglass material sized to properly to fit flush in the existing metal frame. Fiberglass grate for Catch Basins shall be Grate Glass "M" Mesh Composite Drain by Road Masters International or approved equal and shall meet AASHTO M 306 or HS-20 loading requirements. This work will include removing the damaged/missing grate as identified by the Director, cleaning the existing frame, and to

fit/retrofit a new grate in the existing frame, measured per each Drop Inlet Catch Basin Grate.

#### CF-332 Drop Inlet Catch Basin Frame

Drop Inlet Catch Basin frames shall meet AASHTO M 306 loading requirements and shall be of the proper size and installed to meet the requirements of the SWBNO drawings for the type of catch basin repaired. This work will include removing the damaged/missing grate and frame and to fit/retrofit a new frame to the structure including incidental removal and replacement of the bordering roadway and cleaning and reinstallation of the existing salvaged grate, or in conjunction with a grate pay item(s) as directed by the Director. Work and materials for Drop Inlet Catch Basin Frame includes the removal of the existing grate and frame as necessary and furnishing and installing a new frame including all components and any related preparation or finishing work to the basin for the new frame installation, measured per each Drop Inlet Catch Basin Frame. If no structural repair or vertical adjustment work is required, then Drop Inlet Catch Basin Frame placement shall include any incidental brick and mortar work required for the installation of the frame. If structural repairs or vertical adjustments are required, then the Drop Inlet Catch Basin Frame pay item may be used in conjunction with other pay item(s) for repair or vertical adjustments. The Director will have sole authority in determining whether structural repairs or vertical adjustments are required.

#### CF-335 Drop Inlet Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings

Work to repair or provide vertical adjustment of drop inlet catch basin reusing existing metal castings shall consist of: remove and salvage the existing frame or frame and grate, remove all of the existing brick and mortar structure to the lowest elevation of brick area requiring repair or adjustment, furnish and install new brick and mortar courses matching the existing size and location of the original structure, and clean and reinstall the salvaged frame or frame and grate, measured per each.

#### CF-336 Drop Inlet Catch Basin Repair or Vertical Adjustment Brick Work Only

Work to repair or provide brick work only for vertical adjustment of Drop Inlet Catch Basins shall consist of removing all or a portion of the existing brick and mortar structure down to the lowest brick course elevation requiring repair and furnishing and installing new brick and mortar courses matching the existing size and location of the original structure. Drop Inlet Catch Basin Repair or vertical Adjustment Brick Work Only, measured per each, shall be used in conjunction with a pay item for installing a new drop inlet frame.

F. Mountable Catch Basin items - Mountable catch basin shall conform to the requirements shown on SWBNO Standard Drawings D-3431-A Standard Single Mountable Catch Basin and D-3431-B Standard Double Mountable Catch Basin, except:

#### CF-351 Mountable Catch Basin Grate

Work to provide and install Mountable Catch Basin Grate shall include furnishing and installing a grate in the mountable catch basin existing frame. Mountable Catch Basins shall receive new grates made of fiberglass material sized to properly to fit flush in the existing metal frame. Fiberglass grates for Catch Basins shall be Grate Glass "M" Mesh Composite Plate by Road Masters International or approved equal and shall meet AASHTO M 306 or HS-20 loading requirements. This work will include removing the damaged/missing grate as identified by the Director, cleaning the existing frame, and to fit/retrofit a new grate in the existing frame, measured per each Mountable Catch Basin Grate.

#### CF-352 Single or Double Mountable Catch Basin Frame

Mountable Catch Basin frames shall meet AASHTO M 306 loading requirements and shall be of the proper size and installed to meet the requirements of the SWBNO drawings for the type of catch basin repaired. This work will include removing the damaged/missing grate and frame and to fit/retrofit a new frame to the structure including incidental removal and replacement of the bordering roadway and curb, transition to match the adjacent roadway and curb, and cleaning and reinstallation of the existing salvaged grate, or in conjunction with a grate pay item(s) as directed by the Director. On rigid pavement streets, after installation of mountable catch basin frame an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings

and included in the unit price bid for this item. Work and materials for Single or Double Mountable Catch Basin Frame includes the removal of the existing grate and frame as necessary and furnishing and installing a new frame including all components and any related preparation or finishing work to the basin for the new frame installation, measured per each Single or Double Mountable Catch Basin Frame. If no structural repair or vertical adjustment work is required, then Mountable Catch Basin Frame placement shall include any incidental brick and mortar work required for the installation of the frame. If structural repairs or vertical adjustments are required, then the Single Mountable Catch Basin Frame or Double Mountable Catch Basin Frame pay item may be used in conjunction with other pay item(s) for repair or vertical adjustments. The Director will have sole authority in determining whether structural repairs or vertical adjustments are required.

CF-353 Lockable Mountable Catch Basin Grate

Work to provide and install Lockable Mountable Catch Basin Grate shall include furnishing and installing a grate in the mountable catch basin existing frame. Mountable Catch Basins shall receive new grates which shall conform to the requirements of East Jordan Iron Works, INC. V4510-1L or approved equal and shall be installed to properly fit flush in the existing metal frame. This work will include removing the damaged/missing grate as identified by the Director, cleaning the existing frame, and to fit/retrofit a new grate in the existing frame, measured per each Lockable Mountable Catch Basin Grate.

CF-355 Single Mountable Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings, and

CF-356D Double Mountable Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings

Work to repair or provide vertical adjustment of single or double mountable catch basin reusing existing metal castings shall consist of: remove and salvage the existing frame(s) or frame(s) and grate(s), remove all of the existing brick and mortar structure to the lowest elevation of brick area requiring repair or adjustment, furnish and install new brick and mortar courses matching the existing size and location of the original structure, and clean and reinstall the salvaged frame or frame and grate, measured per each. On rigid pavement streets, after adjustment of the mountable catch basin an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings STD9 and included in the unit price bid for this item.

CF-357 Single Mountable Catch Basin Repair or Vertical Adjustment Brick Work Only, and

CF-358 Double Mountable Catch Basin Repair or Vertical Adjustment Brick Work Only

Work to repair or provide brick work only for vertical adjustment of Single or Double Mountable Catch Basins shall consist of removing all or a portion of the existing brick and mortar structure down to the lowest brick course elevation requiring repair and furnishing and installing new brick and mortar courses matching the existing size and location of the original structure. Single or Double Mountable Catch Basin Repair or vertical Adjustment Brick Work Only, measured per each, shall be used in conjunction with a pay item for installing a new mountable catch basin frame.

G. Manhole items - Manhole items shall conform to the requirements shown on SWBNO Standard Drawings D-870 Standard Drain Brick Manhole and D-871 Drain Manhole Frame & Cover or 3143-E-1 Sewer and Water Manhole Castings to match the type utility repaired. Manholes that are approved as described here-in, shall be adjusted to match with the level of the new surface using brick and mortar. Only City of New Orleans Department of Public Works and Sewerage and Water Board manholes and structures shall be adjusted to grade under this contract. Other manholes and structures shall be adjusted to grade by the respective utility company.

CF-371 Manhole Cover

Work to provide and install Manhole Covers shall include furnishing and installing a cover on the manhole existing frame. The new manhole cover shall be sized and installed properly to fit flush in the



existing metal frame and shall meet AASHTO M 306 or HS-20 loading requirements. This work will include removing the damaged/missing cover as identified by the Director, cleaning the existing frame, and to fit/retrofit a new cover to the existing frame, measured per each Manhole Cover.

#### CF-372 Manhole Frame

Manhole frames shall meet AASHTO M 306 loading requirements and shall be of the proper size and installed to meet the requirements of the SWBNO drawings for the type of manhole repaired. This work will include removing the damaged/missing cover and frame and to fit/retrofit a new frame to the structure including incidental removal and replacement of the bordering roadway and cleaning and reinstallation of the existing salvaged grate, or in conjunction with a grate pay item(s) as directed by the Director. Work and materials for Manhole Frame includes the removal of the existing cover and frame as necessary and furnishing and installing a new frame including all components and any related preparation or finishing work to the manhole for the new frame installation, measured per each Manhole Frame. On rigid pavement streets, after installation of the frame an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings and included in the unit price bid for this item.

Manhole Frame placement shall include any brick-and-mortar work required for the adjustment of the frame to the existing or new road pavement grade, inclusive of the requirements of item CF-377 at no additional compensation. The Director and the S&WB will have authority in determining whether structural repairs or vertical adjustments are required.

#### CF-375, Manhole Repair or Vertical Adjustment up to 6" Reusing Existing Metal Castings

Work to repair or provide a vertical adjustment of manholes up to 6" reusing existing metal castings shall consist of: remove and salvage the existing frame or frame and cover, excavation, remove all of the existing brick and mortar structure requiring repair or adjustment, furnish and install new brick and mortar courses matching the existing size and location of the original structure, sealing the exposed exterior surface, backfill, and clean and reinstall the salvaged frame or frame and cover, to repair or provide a vertical increase or decrease elevation adjustment to grade up to six inches (6"), measured per each (location). On rigid pavement streets, after adjustment of the manhole an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings and included in the unit price bid for this item.

#### CF-376, Manhole Repair or Vertical Adjustment over 6" Reusing Existing Metal Castings

Work to repair or provide vertical adjustment of manholes over 6" reusing existing metal castings shall consist of: remove and salvage the existing frame or frame and cover, excavation, remove all of the existing brick and mortar structure requiring repair or adjustment, furnish and install new brick and mortar courses matching the existing size and location of the original structure, sealing the exposed exterior surface, backfill, and clean and reinstall the salvaged frame or frame and cover, to repair or provide a vertical increase or decrease elevation adjustment to grade over six inches (6"), measured per foot height, or any fraction of a foot to the nearest 0.1'. On rigid pavement streets, after adjustment of the manhole an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings and included in the unit price bid for this item.

#### CF-377, Manhole Repair or Vertical Adjustment up to 6" Brick Work Only

Work to repair or provide brick work only for vertical adjustment up to 6" for manholes shall consist of excavation, removing all or a portion of the existing brick and mortar structure requiring repair or adjustment, and furnishing and installing new brick and mortar courses matching the existing size and location of the original structure, sealing the exposed exterior surface, and backfill to repair or provide a vertical increase or decrease elevation adjustment to grade up to six inches (6"). Manhole Repair or

Vertical Adjustment up to 6” Brick Work Only, measured per each (location). This item shall be used in conjunction with the appropriate pay items for installing a new manhole frame and cover. On rigid pavement streets, after adjustment of the manhole an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings and included in the unit price bid for this item.

CF-378, Manhole Repair or Vertical Adjustment over 6” Brick Work Only  
 Work to repair or provide brick work only for vertical adjustment over 6” for manholes shall consist of excavation, removing all or a portion of the existing brick and mortar structure requiring repair, and furnishing and installing new brick and mortar courses matching the existing size and location of the original structure, sealing the exposed exterior surface, and backfill. Manhole Repair or Vertical Adjustment over 6” Brick Work Only, to repair or provide a vertical increase or decrease elevation adjustment to grade over six inches (6”), shall be measured per foot height or any fraction of a foot to the nearest 0.1’. This item shall be used in conjunction with the appropriate pay items for installing a new manhole frame and cover. On rigid pavement streets, after adjustment of the manhole an isolation pad of 4,000 psi concrete shall be installed as per details shown on City of New Orleans Department of Public Works Standard Drawings and included in the unit price bid for this item.

H. Measurement and payment of Special Bid Items for Catch Basin and Manhole Repairs and Vertical Adjustment:

ITEM NO.	PAY ITEM	PAY UNIT
CF-301,	Vertical Catch Basin Cover,	per each*
CF-302,	Vertical Catch Basin Frame,	per each*
CF-303,	Lockable Vertical Catch Basin Frame and Cover,	per each*
CF-311,	Vertical Catch Basin Front Grate No. 1,	per each*
CF-312,	Vertical Catch Basin Front Grate No. 2,	per each*
CF-313,	Vertical Catch Basin Front Grate No. 3,	per each*
CF-315,	Single Vertical Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings,	per each
CF-316D,	Double Vertical Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings,	per each
CF-317,	Single Vertical Catch Basin Repair or Vertical Adjustment Brick Work Only,	per each
CF-318D,	Double Vertical Catch Basin Repair or Vertical Adjustment Brick Work Only,	per each
CF-331,	Drop Inlet Catch Basin Grate,	per each
CF-332,	Drop Inlet Catch Basin Frame,	per each
CF-335,	Drop Inlet Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings,	per each
CF-336,	Drop Inlet Catch Basin Repair or Vertical Adjustment Brick Work Only,	per each
CF-351,	Mountable Catch Basin Grate,	per each*
CF-352,	Single or Double Mountable Catch Basin Frame,	per each
CF-353,	Lockable Mountable Catch Basin Grate,	per each*
CF-355,	Single Mountable Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings,	per each
CF-356D,	Double Mountable Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings,	per each
CF-357,	Single Mountable Catch Basin Repair or Vertical Adjustment Brick Work Only,	per each
CF-358D,	Double Mountable Catch Basin Repair or Vertical Adjustment Brick Work Only,	per each
CF-371,	Manhole Cover,	per each

- CF-372, Manhole Frame, per each
- CF-375, Manhole Repair or Vertical Adjustment up to 6” Reusing Existing Metal Castings, per each
- CF-376, Manhole Repair or Vertical Adjustment over 6” Reusing Existing Metal Castings, per foot height
- CF-377, Manhole Repair or Vertical Adjustment up to 6” Brick Work Only, per each
- CF-378, Manhole Repair or Vertical Adjustment over 6” Brick Work Only, per foot height

\*Note, double catch basins requiring two covers, frames, or grates each shall be paid for separately.

## **SECTION 3.17 - DRAIN LINE REPAIRS / REPLACEMENT**

### **3.17.01 GENERAL**

A. These items shall be governed by the requirements of the “General Specifications for Street Paving,” the City of New Orleans, State of Louisiana, latest edition, Section C701 Storm Drains shall be the General Conditions for this Contract and shall govern except as modified here-in. All workmanship, material and tests shall conform to Section E of the General Specifications of the S&WB and the S&WB Standard Drawing No. 7260-S or 7260-D for the type of pipe material installed. When Culverts and Storm Drains replacement or repair items have been shown on the unit price proposal the final approved quantity for installation, measurement, and payment shall be determined by and subject to written approval of the Director and shall not be considered a material part of the work contemplated. Only locations specifically approved in writing by the Director before or during construction shall be measured and paid for at the unit price bid with no adjustment to the unit price for an increase or decrease in the bid quantity for approved work.

B. The Contractor shall conduct his operations in such manner as to cause the least possible interruption to service. The Contractor shall maintain drainage and driveway access at the end of the day's pipe laying. Open trenches shall only be as long as the length of pipe to be laid that day. At the end of the day's work, the end of the last length of pipe laid shall be blanked with a cover to prevent intrusion of trash. The Contractor shall provide bracing at power poles as per instructions from the utility owner where the trench excavation is adjacent to the poles (no direct pay). The Contractor shall exercise caution when placing and compacting backfill and bedding material as not to damage the pipe or cause joints to move out of place. The Contractor shall replace, at his own expense, any pipe, fittings, and other materials in existing installation which are damaged due to his operations. All pipe installations shall be inspected by the engineer's field representative before backfilling operations commence.

C. New pipe between two existing structures and pipe used for point repairs shall match the alignment and elevations of the existing pipe to be replaced unless otherwise shown in the plans or directed by the Director or the S&WB.

### **3.17.02 REPLACEMENT**

A Pipe used for the replacement of the entire length of existing drain lines between manholes or structures shall be new reinforced concrete pipe conforming to Section E of the S&WB General Specifications installed as shown on SWBNO Standard Drawing No. D-3809, D-3810, D-3933, or D-3934.

B. New Class IV Reinforced Concrete Pipe shall be required when the cover over the pipe within the roadway between 2.0-2.5 ft. The installation of reinforced concrete pipe shall be installed as shown on SWBNO Standard Drawing No. D-3809, D-3810, D-3933 or D-3934.

### **3.17.03 DRAIN LINE REPAIRS**

A. Pipe used for Point Repairs of Existing Drain Lines may be new reinforced concrete pipe conforming to Section E of the S&WB General Specifications or solid wall polyvinyl chloride (PVC) pipe at the Contractors option unless otherwise noted.

B. New Class IV Reinforced Concrete Pipe shall be required when the cover over the pipe within the roadway is less than 2.5 ft.

C. Solid wall PVC pipe less than 18-inches in diameter, unless otherwise noted, shall be SDR 26 (PS115) Polyvinyl Chloride (PVC) pipe manufactured in accordance with ASTM D3034, latest edition, and shall be U.L. listed. Solid wall PVC pipe sizes 18-inches through 30-inches in diameter, unless otherwise noted, shall be PS115 Polyvinyl Chloride (PVC) pipe manufactured in accordance with ASTM F679, latest edition, and shall be U.L. listed. The elastomeric gaskets and retainer rings shall be installed in accordance with ASTM D3212 and F477, or per latest Sewerage & Water Board requirements. The fittings for solid wall PVC pipe shall be SDR 35 and shall have the same inside diameter as the solid wall PVC.

D. PVC pipe used for drain point repairs up to 30" diameter shall be installed as shown on SWBNO Standard Drawing No. 4697-E5-A. PVC pipe connecting to brick manholes shall be installed as shown on SWBNO Standard Drawing No. 6178\_B\_6.

### **3.17.04 PAYMENT**

A. Payment for drain line replacement or repairs shall conform to the "General Specifications for Street Paving," the City of New Orleans, State of Louisiana, latest edition, Section C701 Culverts and Storm Drains, C701.08 PAYMENT when listed on the Unit Price Form proposal.

### **SECTION 3.18 - TIMBER CURB**

A. This item shall be governed by the requirements of Standard Specification Item C707 (64) Timber Curb except as modified here-in. The unit price bid per horizontal Linear Foot of finished timber curb for this item shall include removal and proper disposal of existing timber curb and posts, grading, furnishing, and installing all required timber posts and timber curb, and final grading.

B. Measurement and payment for Timber Curb, including posts, shall be made at the contract unit price per Linear Foot (LF) of timber curb under Special Bid Item No. CF - 15 TIMBER CURB when listed on the Unit Price Form.



### **SECTION 3.19 - TYPE-A DEAD END INSTALLATION**

A. The Dead-End Installation shall be governed by the requirements of 2006 Edition LADOTD Standard Specifications for Roads and Bridges section 729.06 except as modified here-in. The Contractor shall be responsible for providing all materials including guard rail, u-channel signposts and required signs and construction of guard rail and installation of signs as required by standard plan HS-03. Payment for Item CF-16, when listed on the Unit Price Form, shall include all material, equipment, and labor necessary to complete installation including guard rail as noted.

B. Dead end road installations shall be as specified and located as shown on the project plans. Posts shall be vertical. Guard rail shall be constructed in accordance with 2006 Edition LaDOTD Standard Specifications for Roads and Bridges section 704. Contractor shall re-grade and ensure positive drainage within the limits of the area disturbed by construction. Any fill material shall be placed at no direct pay and shall meet all requirements for fill material of this project. Fill material shall be suitable on-site excavated earth material, subject to approval of the Director, or borrow material compliant with the requirements Standard Specification Item C723 Granular Material with subsection 1003.07 referencing 2006 Edition LaDOTD Standard Specifications for Roads and Bridges. Fill and borrow materials shall be free from waste, rubbish, large rocks, or other unsuitable or foreign material.

### **SECTION 3.20 - CONCRETE BARRIER OR MOUNTABLE CURB WITH LAYING STRIP**

A. This item shall be governed by the requirements of Standard Specification Section C707 except as modified here-in.

B. See details for Concrete Barrier Curb and Laying Strip and for Concrete Mountable Curb and Laying Strip on the Construction Drawings Typical Roadway and Section Details sheets for additional concrete strip required to be placed between the concrete pavement and concrete curb for construction of composite roadways.

C. There shall be no direct measurement and payment for the laying strip portion of the concrete barrier curb or concrete mountable curb. All associated costs shall be included in other major items of the proposal.

### **SECTION 3.23 – NON-STANDARD WATER POINT REPAIR ITEMS**

A. This section identifies special pay items applicable to the water point repairs work outlined in sections 1.22 and 2.12.

B. Payment for furnishing and installing water point repairs shall be made at the contract unit price including main line point repair installed as a complete system, including tie-ins, excavation, removal of existing pipe, pumping as necessary to prevent contaminating the existing system, bedding, complete shoring, backfilling material, hauling and disposal of excavation material, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form.

C. Payment for furnishing and installing 1-inch through 2-inch Polyethylene Pipe for water house connections (LSL replacement) shall be made at the contract unit price per each. Payment for this item

shall include all mobilization of labor, equipment, and materials needed for excavation, backfilling, service saddles, corporation cock, removal of existing lead pipe from water main to meter and replacement of water house connection, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form. There shall be no direct payment for tie-ins to the main or meter. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public.

C.1 Payment for water house connection inspection shall include all documentation and reporting requirements listed in Section 1.22. Excavation and backfilling of soil or non pavement material for inspection around meters located outside of paved areas will be done at no direct pay. Inspection excavation for meters located within paved areas will be paid per contract unit prices as applicable.

C.2 Payment for concrete and asphalt roadway removal and replacement shall be made at the contract unit price per square yards. Payment for this item shall include all mobilization of labor, equipment, and materials needed for concrete and asphalt pavement removal and disposal, roadway excavation, full depth saw cutting perimeter of excavation, 8” reinforced concrete pavement or 7” asphalt pavement (2” wearing and 5” binder course), 8” base course, geogrid, geotextiles, subgrade preparation, all in accordance with DPW General Specifications, Standard Drawings, and Special Provisions. Utility structures, castings, covers, and similar that are found within the area of removal & replacement of roadway will be adjusted and reset at no direct pay. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public. This item will not conform with DPW General Specifications or Special Provisions payment methods.

C.3 Payment for concrete curb removal and replacement shall be made at the contract unit price per linear foot. Payment for this item shall include all mobilization of labor, equipment, and materials needed for removal, disposal, full depth saw cutting, and replacement of mountable and barrier concrete curb, with or without gutter bottom found on asphalt or concrete pavement. Installation of new curb or curb gutter bottom shall match existing curb type and conform to DPW General Specifications, Standard Drawings, and Special Provisions. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public. This item will not conform with DPW General Specifications or Special Provisions payment methods.

C.4 Payment for granite/stone curb removal, storage, and replacement shall be made at the contract unit price per linear foot. Payment for this item shall include all mobilization of labor, equipment, and materials needed for the granite/stone curb removal and replacement. This item shall reuse existing granite/stone curb that can be salvaged and reset or the use of new granite/stone curb. This item shall conform to DPW General Specifications, Standard Drawings, and Special Provisions. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public. This item will not conform with DPW General Specifications or Special Provisions payment methods.

C.5 Payment for concrete sidewalk removal and replacement shall be made at the contract unit price per square yard. Payment for the removal and replacement of ADA ramps shall be made at the contract

unit price for sidewalk removal and replacement. Payment for this item shall include all mobilization of labor, equipment, and materials needed for the removal and disposal of existing concrete sidewalk or ADA ramp, full depth saw cutting perimeter of removal, backfilling, and replacement of reinforced concrete sidewalk or ADA ramp in accordance with DPW General Specifications, Standard Drawings, and Special Provisions. Utility structures, castings, covers, and similar that are found within the area of removal & replacement of sidewalk will be adjusted and reset at no direct pay. Type of ADA ramp replaced will be at the discretion of SWBNO. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public. This item will not conform with DPW General Specifications or Special Provisions payment methods.

C.6 Payment for concrete driveway removal and replacement shall be made at the contract unit price per square yard. Payment for this item shall include all mobilization of labor, equipment, and materials needed for the removal and disposal of existing concrete driveway, full depth saw cutting perimeter of removal, backfilling, and replacement of reinforced concrete driveway in accordance with DPW General Specifications, Standard Drawings, and Special Provisions. Utility structures, castings, covers, and similar that are found within the area of removal & replacement of driveway will be adjusted and reset at no direct pay. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public. This item will not conform with DPW General Specifications or Special Provisions payment methods.

C.7 Payment for brick/decorative sidewalk and driveway removal and replacement shall be made at the contract unit price per square yard. Payment for this item shall include all mobilization of labor, equipment, and materials needed for the removal of existing sidewalk and driveway, full depth saw cutting perimeter of removal, backfilling, and replacement of brick/decorative sidewalk and driveway in accordance with DPW General Specifications, Standard Drawings, and Special Provisions. Existing brick driveways and sidewalks shall be removed and stored on sight for reuse purpose at the discretion of SWBNO. This item shall include the use of new bricks as replacement if existing bricks are not repurposed at SWBNO discretion. This item shall include the replacement of decorative sidewalk and driveways using the same pattern and color as was removed. Utility structures, castings, covers, and similar that are found within the area of removal & replacement of brick/decorative sidewalk and driveway will be adjusted and reset at no direct pay. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public. This item will not conform with DPW General Specifications or Special Provisions payment methods.

C.8 Payment for furnishing and installing 5/8-inch through 2-inch Polyethylene Pipe for water house connections (LSL replacement) from meter to property line at school locations shall be made at the contract unit price per each. Payment for this item shall include all mobilization of labor, equipment, and materials needed for excavation, backfilling, removal of existing pipe from meter to property line and replacement of water house connection matching existing pipe diameter, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form. There shall be no direct payment for tie-ins to existing water house connection or meter. Payment for this item shall include the use of any temporary signs, barricades, pavement markings needed to secure the work area and protect the health and safety of the public.

D. Payment for furnishing and installing 2-inch Polyethylene Pipe watermain shall be made at the contract unit price per linear foot, including main line fittings (bends, tees, etc.), tie-ins, excavation, removal of existing pipe (if any), pumping as necessary to prevent contaminating the existing system, bedding, complete shoring, backfilling material, hauling and disposal of excavation material and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form. There shall be no direct payment for 2" valves as required per the plans.

E. The contractor may request reimbursement of monthly water hydrant meter fees paid to the Board that were used for SWBNO Testing and Flushing of new water mains. The Contractor shall record usage type and read meter on a daily basis. Contractor, Resident Inspector and Board Construction Manager will sign and certify each month's usage.

F. All other items of work necessary to the performance of the project, for which no specific unit price and/or lump sum pay item is established, shall be considered and designated part of the construction, and the existing pay items shall be full compensation. Items including but not limited to, trench safety, traffic control, contract closeout, shop drawings, submittals, and office support shall be merged into the prices bid.

G. There will be no direct payment for temporary water mains, temporary water service connections, and any related work including temporary tie-ins, removal of temporary work after installation of permanent work, and other incidentals. The cost of all work shall be included in the water point repair unit bid prices.

H. Measurement and payment of Special Bid Items for Water Point Repairs include:

ITEM NO.	PAY ITEM	PAY UNIT
CSW741-01	Repair Water Main with Full Circle Clamp (Pipe Size 4" – 8")	Each
CSW741-02	Repair Water Main with Full Circle Clamp (Pipe Size 12" – 16")	Each
CSW741-03	Repair Water Main with Bell Joint Clamp (Pipe Size 4" – 12")	Each
CSW741-04	Repair Water Main with Bell Joint Clamp (Pipe Size 16" – 24")	Each
CSW741-05	Repair Water Main by Remove and Replace – Minimum Length 4 FT, Maximum Length 10 FT (Pipe Size 4" – 12")	Each
CSW741-06	Repair Water Main by Remove and Replace – Minimum Length 4 FT, Maximum Length 10 FT (Pipe Size 16" – 24")	Each
CSW741-07	Repair Water Main by Remove and Replace – Beyond 10 FT, Maximum 18 FT (Pipe Size 4" – 12")	LF
CSW741-08	Repair Water Main by Remove and Replace – Beyond 10 FT, Maximum 18 FT (Pipe Size 16" – 24")	LF
CSW741-09	Replace 5/8" to 1" Lead Service Line Water House Connection with 1" Polyethylene Water House Connection (From Main to Meter)	LF
CSW741-10	Replace 1.5" Lead Service Line Water House Connection (From Main to Meter)	LF
CSW741-11	Replace 2" Lead Service Line Water House Connection (From Main to Meter)	LF
CSW741-12	2" New Water Main with Main Line Fittings	LF
TS1	Water House Connection Inspection	EA
TS2	Concrete (Removal & Replacement)	SY
TS3	Asphalt (Removal & Replacement)	SY
TS4	Concrete Curb (Removal & Replacement) (With or Without Gutter)	LF
TS5	Granite/Stone Curb (Removal, Storage, & Replacement)	LF
TS6	Concrete Sidewalk (Removal & Replacement)	SY
TS7	Concrete Driveway (Removal & Replacement)	SY
TS8	Brick/Decorative Sidewalk & Driveways (Removal & Replacement)	SY
TS9	Replace 5/8" to 2" Lead Service Line Water House Connection (From Meter to Property line)	EA

## **SECTION 3.24 – WELL POINT SYSTEM**

### **PART 1 – GENERAL**

1. Scope of Work
  1. Furnish, install, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
  2. The Contractor shall be responsible for the satisfactory performance of the system and for correcting any disturbance of natural bearing of soils or damage to structures caused by the dewatering system or by interruption of the continuous operation of the system as specified.
  3. Continuously monitor and maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, prevention of flooding in excavation, and prevention of damage to subgrades and permanent structures. Prevent surface water from entering excavations by grading, dikes, or other means.
  4. Remove dewatering system once construction is complete and no damage will be caused to the installed pipe or structure from the well point system.
  5. Reference Section 01 100 Boring Logs and Coring Data for site specific geotechnical information.
2. Submittals
  1. Prior to excavation, the Contractor shall submit detailed drawings and design calculations descriptive of the proposed well point system used in maintaining dry conditions to the Engineer. This submittal shall be prepared and sealed by a professional engineer licensed in the State of LA.
  2. Submit plan showing arrangement, locations, and details of wells and well points; locations of risers, headers, filters, pumps, power units, and discharge lines; and means of discharge, control of sediment, and disposal of water.
  3. Include layouts of piezometers and flow-measuring devices for monitoring performance of dewatering system.
  4. Include written plan for dewatering operations including sequence of well and well-point placement coordinated with excavation shoring and bracings and control procedures to be adopted if dewatering problems arise
  5. Existing Conditions: Using photographs or video recordings, show existing conditions of adjacent construction and site improvements that might be misconstrued as damage caused by dewatering operations. Submit before Work begins.
  6. Record Drawings: Identify locations and depths of capped wells and well points and other abandoned-in-place dewatering equipment.

### 3. Installation

1. Install dewatering system to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
2. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways, if required, using approved traffic control plans by authorities having jurisdiction.
3. Install dewatering system utilizing wells, well points, or similar methods complete with pump equipment, standby power and pumps, filter material gradation, valves, appurtenances, water disposal, and surface-water controls.
  1. Space well points or wells at intervals required to provide sufficient dewatering.
  2. Use slotted screen to prevent pumping of fine sands or silts from the subsurface.
  3. Provide two groundwater observation wells for each setup.
4. Place dewatering system into operation to lower groundwater level to allow for dry working conditions within the excavation. Provide sumps, sedimentation tanks, and other flow-control devices as required by authorities having jurisdiction.
5. Provide standby equipment on-site, installed and available for immediate operation, to maintain dewatering on continuous basis if any part of the system becomes inadequate or fails.
6. Dewatering shall be required until the pipes and structures to be built have been completed to the extent that they will not be floated or otherwise damaged by allowing water levels to rise or return to natural elevations.

### 4. Operation

1. Operate system to lower and control ground water to permit excavation, construction of structures, and placement of fill materials on dry subgrades. Drain water-bearing strata above and below bottom of foundation of utilities and other structures where required.
  1. Do not permit open-sump pumping that leads to loss of fines, soil piping, subgrade softening, and slope instability.
  2. Reduce hydrostatic head in water-bearing strata below subgrade elevations of foundations, drains, sewers, and other excavations.
  3. Maintain piezometric water level a minimum of 24 inches below bottom of excavation.
  4. Operate system continuously until drains, sewers, and structures have been constructed and fill materials have been placed or until dewatering is no longer required.
2. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.
3. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
4. The dewatering system shall be operated so that the groundwater level outside the excavation is not altered to an extent that would damage or endanger adjacent structures or property.



5. Plug or fill well holes with sand or cut off and cap wells with a flowable fill of a grout or sane mixture a minimum of 36 inches below the existing ground surface. Where well points are installed within the section of roadway to be replaced, the wells must be capped a minimum of 36 inches below the base course of the pavement section.

## 5. FIELD QUALITY CONTROL

1. Observation Wells: Provide a minimum of two observation wells or piezometers
2. Observe and record daily elevation of ground water and piezometric water levels in observation wells.
3. Repair or replace, within 24 hours, observation wells that become inactive, damaged, or destroyed. In areas where observation wells are not functioning properly, suspend construction activities until reliable observations can be made.
4. Add or remove water from observation-well risers to demonstrate that observation wells are functioning properly.
5. While dewatering for new construction in the vicinity of existing structures, depletion of the groundwater level underneath these existing structures may cause settlement of within the site footprint and at some distance beyond the footprint. To avoid this settlement, the groundwater level under these structures shall be maintained by appropriate methods.
6. Survey-Work Benchmarks: Resurvey benchmarks regularly during dewatering and maintain an accurate log of surveyed elevations for comparison with original elevations. Promptly notify Engineer if changes in elevations occur or if cracks, sags, or other damage is evident in adjacent structures.
7. The contractor shall ensure appropriate the before and after condition of nearby structures and ground surfaces is recorded using photo and video documentation prior to the installation of any well points. The time and date of the recordings shall be labeled within the file.

## 6. Measurement and Payment

1. Well-pointing measured in areas of drainage and/or sanitary sewer installation with excavations deeper than 5 feet. Well-pointing measured for payment only with engineer's or owner's field approval.
2. Measurement. Well point systems or dewatering systems shall be measured by the "block linear foot" (BLFT) of street block requiring the well point system. The measurement shall be taken along the centerline of the block for the length of the open trench.
3. Payment. Shall be made at the contract unit price, per BLFT, for bid item



CSS742(X14) WELL POINT SYSTEM measured as outlined. Such payment shall be full compensation for all materials, equipment and labor necessary to furnish, install, operate and maintain the well point system, including any necessary traffic warning systems or any work necessary to restore the site to its original condition.

## **SECTION 3.25 – PRE AND POST REHABILITATION CCTV INSPECTION AND CLEANING DRAIN STRUCTURE(S)**

### **SECTION 3.25.A – VIDEO RECORDING**

- A. The Contractor shall furnish all labor, equipment, supplies, and supervision and shall perform all work required in accordance with these specifications. CCTV inspection shall be performed in the areas selected and approved by the Owner.
- B. It shall be the responsibility of the Contractor to schedule and perform investigations to prevent system overflows. If flows are such that they interfere with the Contractor's ability to collect accurate data, then the Contractor shall be responsible to schedule his work during low flow periods or to request written permission to perform by-pass pumping around the site. The Contractor may provide by-pass pumping only with specific approval from the City.
- C. Inspection of storm drain infrastructure by means of CCTV equipment shall be performed to determine the location and extent of any obstructions and defects such as offset joints, protruding tees, broken pipe, and other pipe defects. Logs shall note the existence of any significant defects. Cleaning by the Contractor shall be performed prior to each CCTV inspection on each pipeline to be inspected.
- D. CCTV inspections shall be performed on one drainage structure-to-drainage structure pipe segment at a time. The inspection shall be performed by moving the CCTV camera through the line along the axis of the pipe at a rate not to exceed 30 feet per minute. Any means of propelling the camera through the pipe that would exceed this rate of speed or produce non-uniform or jerky movements shall not be acceptable. The camera shall be stopped for a minimum of 5 seconds at each identifiable defect to ensure proper documentation of the line's condition. In addition, the camera shall be stopped at each service connection, and the camera shall pan the service connection to video inside the service line. CCTV inspection is performed from the upstream manhole/catch basin to the downstream manhole/catch basin when the conditions allow. If conditions do not allow an upstream to downstream inspection, the inspection will be performed in reverse (from the downstream to the upstream drainage structure).
- E. A header screen showing tape number, segment number, and manhole number shall be taped for 10 seconds at the beginning of each televised line segment. All header information shall be recorded on the log forms.
- F. At the Contractor's discretion the camera shall be stopped or backed up to view and analyze conditions that appear to be unusual or uncommon for a sound storm drain line. At all times,

the operating technician shall be able to move the camera through the line in either direction without loss of quality in the video presentation on the monitor. The picture shall be free of electrical interference and provide a clear, stable image of the specified resolutions at all times. The camera lens shall be cleaned, as required, to provide a clear image within the storm drain lines.

- G. In the event that equipment becomes lodged in the line segment, the Contractor shall notify the City immediately. The City will remove the camera at no cost to the Contractor. Timely excavation is necessary to maintain project schedules and to eliminate the possibility of overflows resulting from the lodged equipment creating a blockage.
- H. Continuous video recordings of the inspection view as it appears on the television monitor shall be taken. It is intended that a video recording will be made of the complete television inspection of all storm sewer lines as part of this project. The video recording shall be one on which both sound and video information can be reproduced with a video image equal to or better than the quality of the original picture on the television monitor.

A pan tilt zoom (PTZ) camera shall be used to conduct the inspection. The camera shall be waterproof and corrosion resistant and able to operate in temperatures between 0-50 degrees C (32-122F). The sensor shall be ¼" color CCD with minimum 1.5 lux sensitivity for resolution of minimum 460 NTSC TV lines. A full 360-degree axial pan is required with a variable pan speed not to exceed 25 degrees/second. The camera shall have a minimum 40:1 zoom lens capable of 10X optical and 4X digital, with auto or remote manual focuses. The adjustment of focus and iris shall allow optimum picture quality to be achieved and shall be remotely operated. The illumination shall be such as to allow an even distribution of light around the pipeline perimeter without the loss of contrast or flare out of picture shadowing.

The replay of the recorded video information, when reviewed on a monitor-receiver, shall be free of electrical interference and shall produce a clear, stable image with a horizontal resolution equal to that of the television monitor in the television inspection studio. The audio portion of the completed signal shall be sufficiently free of electrical interference and background noise to produce an oral report that is clear and complete, and easily discernible. The audio portion of the tape report shall include the location or identification of the section, the manhole-to-manhole direction of travel, and the distance traveled on the specific run encountered. The audio portion of the tape shall also identify all defects. The video equipment shall be continuously connected to the television inspection or monitoring equipment. The video and monitoring equipment shall have the built-in capability to allow the technician to instantly review both the audio and video quality of the video productions at all times during the television survey. Playback speed shall be continuously adjustable from one-third normal speed for slow motion viewing to normal playback speed.

A suitable distance-reading device which uses cable length to accurately measure the location of the camera in the pipe shall be provided. This device shall be accurate to +/- 1% of the length of the inspection.

- I. Laser Equipment Inspection: If determined necessary by DPW, 2-D Laser scanning shall be conducted continuously and simultaneously with other inspection technology for the entire

length of the selected pipe segment. Laser equipment shall be moved through the pipe on a transport vehicle capable of supporting the laser inspection equipment above the water level. Tracked platforms must be capable of forward/stop/reverse mobility for detailed high-resolution scans to be collected at a specified interval.

The laser equipment shall be designed and manufactured to produce a high resolution of measurement resulting in 0.25% of internal diameter, with a laser sensor accuracy of 0.5% or greater (i.e., an accuracy of 0.5 inches at 100 inches in pipelines up to 30 inches in diameter and a repeatability of 0.10% or greater for pipelines from 15 inches to 30 inches in diameter). The laser equipment shall be properly calibrated per the manufacturer's documentation and the calibration shall be recorded for verification.

The laser equipment shall be capable of measuring the distances to objects and surfaces in drain lines and shall be capable of imaging drain lines less than 36" in diameter. The laser shall support 75 Hz scan rates or higher and be Class 1: eye-safe for operator safety. The laser sensor resolution shall be at least 1mm.

The laser equipment shall be operated in a manner to minimize measurement error sources attributable to the effects of the following:

1. Horizontal displacement from off-axis meander or pipeline alignment curvature that distorts cross-section measurement;
2. Vertical displacement due to sediment, debris, offset joints or other physical environment conditions that distorts cross-section measurement; and
3. Vertical displacement due to flow condition or other hydraulic environment factors that distorts cross-section measurement.

An overview of data collected by laser equipment is to be presented in a color-coded format as 2-D cross sections conveying pipe condition above the laser's centerline over the length of the inspection segment. The report shall provide a 2-D representation of an integrated overview of pipe wall thickness loss or increase data revealed from laser scanning and shall be presented in a color-coded format as an unrolled illustration of the pipe condition above the waterline over the length of the inspection segment. The pipe interior is to be flattened into a graphic whose y-axis represents pipe diameter, whose x-axis represents pipe length and whose color represents deviation from expected values indicating a gradation and severity of corrosion or buildup. Measured pipe internal diameter (ID) that coincides with expected values must be coded in a color that positively identifies and differentiates the measurement of the expected values from pipe wall loss or increase. Measured pipe ID that coincides with expected values must be coded green. Outward deformations, as measured by increasing pipe ID, must be colored on a yellow/red color scale, advanced deformation. Material gain (buildup) or inward deformation, as measured by decreasing pipe ID, must be on a blue color scale.

If DPW determines that Laser Inspection is necessary, it will negotiate a unit price for that inspection upon the first use of this type of inspection. The unit price developed will be entered into the contract and used for the duration of the contract at the fixed established unit price.

- J. Video recordings shall be enclosed in plastic containers which shall clearly indicate the date the tape was recorded, the designated section(s) of storm sewer lines contained on the tape, and the referenced storm sewer inspection report covering the sections of the storm sewer lines so

included. Two permanent labels are required. One label shall be placed on the spine and the other on the face of the video. Recording of a single segment shall not span more than one video. The recording of a segment between manholes shall be continuous and complete. The videos become the property of the City, once submitted. The Contractor shall maintain a master copy of all videos and associated Inspection Reports for one year after Contract completion. Additional copies of the videos, if requested, shall be made by the Contractor on professional duplication equipment. Two permanent labels are required. One label shall be placed on the spine and the other on the face of the video. Permanently label each tape with the following information:

Spine of DVD Case

Contract No. _____ Disc No. _____
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Face of DVD Case

Start Manhole	Finish Manhole

- 
- K. CCTV inspection footage of service laterals shall be included on separate videos. The Contractor may include as many service lateral inspections as possible on each video provided that all service lines from the same mainline are on the same video. The DVD spine label shall be identical to those for mainline inspection. The face label of the video shall include the following information: mainline information (upstream manhole to downstream manhole), service line location, survey start point, and survey finishing point.

**SECTION 3.25.B – DRAIN LINE CLEANING**

- A. Standard line cleaning shall be performed to remove foreign material and restore pipe capacity to 95%. Standard cleaning shall be defined as three (3) complete passes of the storm drain line with the cleaning equipment. The term “complete passes” shall mean cleaning from the upstream manhole all the way to the downstream manhole. Cleaning shall be performed with combination cleaning / vacuum trucks.
- B. Heavy line cleaning shall be performed, only if required and approved by the City, to remove foreign material and restore pipe capacity to 95%. Heavy line cleaning shall be defined as four (4) or more complete passes of the storm drain line with the cleaning equipment. The term “complete passes” shall mean cleaning from the upstream manhole all the way to the downstream manhole. Cleaning shall be performed with combination cleaning / vacuum trucks.

- C. Conditions such as broken pipe and major blockages may prevent cleaning from being accomplished, especially where additional damage would result if cleaning were attempted or continued. Should such conditions be encountered and the contractor is unable to clean the entire line from all reasonable points of access and directions, the Contractor shall not be required to clean those specific pipe sections unless the Owner removes the apparent obstruction.
- D. During cleaning operations, satisfactory precautions shall be taken by the Contractor in the use of cleaning equipment. Precautions shall be taken to ensure that damage to or flooding of public or private property does not occur during the cleaning procedure.
- E. Selection of the equipment shall be the sole discretion of the Contractor and based on the conditions of lines at the time the work commences. The equipment shall be capable of removing dirt, grease, rocks, sand, and other materials and obstructions from the storm drain lines and manholes. There shall be no change in cost for use of additional or different equipment utilized at the discretion of the contractor to perform work. Contractor shall notify project engineer and Owner of equipment to be used prior to use or initiation of any work.
- F. All sludge, dirt, sand, rocks, grease, and other solid or semi-solid materials resulting from the cleaning operation shall be removed at the downstream manhole/catch basin of the section being cleaned. Passing materials from pipe segment to pipe segment, which could cause line stoppages, accumulations of debris in wet wells, interference with in-line permanent flow monitoring equipment or damage to pumping equipment will not be permitted.
- G. If the CCTV inspection shows the cleaning to be unsatisfactory, the Contractor shall re-clean and re-inspect the pipe segment at his sole expense until the cleaning is shown to be satisfactory.
- H. All sludge, dirt, sand, rocks, grease, and other solid or semisolid materials removed from the storm drain lines during the cleaning operation shall be drained of water and transported to an approved licensed landfill facility. All costs associated with debris disposal will be the responsibility of the Contractor or as otherwise specified herein.

### **SECTION 3.25.C – LATERAL DRAIN LINE CLEANING**

- A. Contractor will use a lateral launch inspection system, consisting of a robotic tractor and a lateral launch CCTV camera, to remotely deploy a pan & rotate camera into lateral pipes connected to a mainline storm drainpipe. Should Contractor encounter multiple laterals converging in a single tap, Contractor shall utilize a steerable lateral camera with guide pin to inspect the adjoining laterals separately. Each pipe shall be identified as an independent inspection for data submittal and invoicing purposes.
- B. A mainline television camera is used to position the lateral camera launcher. The lateral camera is used to inspect each lateral from the mainline.

- C. The television inspection of the lateral will be attempted from inside the mainline up into the lateral or attempted from the service manhole towards the mainline. Lateral lines inspected from the service manhole towards the mainline will be attempted by using a mini push camera if necessary.
- D. In the event a lateral pipe segment cannot be fully inspected after reasonable attempts to remove obstructions or traverse because of poor structural condition is not successful, Contractor shall provide all the information to the City and the City will determine alternate possible solutions or whether enough information has been obtained to safely assess the proximity of uninspected portions of pipe.
- E. Under no circumstances shall a lateral line be cleaned or inspected on private property or beyond public right-of-way of non-local City street (i.e., federal, federal-aid or state routes) limits. Any cleaning or inspection services performed outside the City approved scope of work, private property, or otherwise specified herein will not be reimbursable and all associated costs contractor responsibility. The connection points for all laterals at the mainline or connecting structure shall be inspected at no direct cost. The limits of lateral lines cleaning and inspection operations for lateral lines connecting a drainage structure to the mainline may end at the drainage structure; however, where feasible the contractor shall point and video record for a sufficient time to obtain a clear view of the lateral system on the private property side (side opposite the mainline) at no additional cost. For lateral lines not connected to a drainage structure the lateral line shall be cleaned and inspected from the connection point to the mainline to the extent feasible on the private property side (side opposite the mainline). If the contractor is unable to reasonably clean or inspect a lateral line beyond the connection to the mainline the contractor shall point and video record for a sufficient time to obtain a clear view of the lateral system on the private property side (side opposite the mainline) at no additional cost. Field reports and video logs shall clearly document and distinguish whether the line cleaned or inspected is a mainline or lateral.

#### **SECTION 3.25.D – DRAINAGE STRUCTURE CLEANING**

- A. The Contractor shall furnish all labor, equipment, supplies, and supervision and shall perform all work required in accordance with these specifications. Drainage structure cleaning, including catch basins, drop inlets, conflict boxes, manholes, etc. shall be performed in the areas selected and approved by the City. Only manholes / catch basins with large debris such as rocks, bricks, trash, tree limbs, etc. will require cleaning. Also, cleaning will be required if small deposits or water has accumulated at greater than or equal to 1/3 of the depth of the manhole / catch basin (measured from rim to invert of the lowest pipe).
- B. Selection of the equipment shall be the sole discretion of the Contractor and based on the conditions of drainage structures at the time the work commences. The equipment shall be capable of removing dirt, grease, rocks, sand, and other materials and obstructions from the drainage structures.
- C. All sludge, dirt, sand, rocks, grease, and other solid or semisolid materials removed from the storm drainage structures during the cleaning operation shall be drained of water and transported

to an approved licensed landfill facility. All costs associated with debris disposal will be the responsibility of the Contractor or as otherwise specified herein.

### **SECTION 3.25.E – TELEVISION INSPECTION REPORTS**

- A. Television Inspection Report: The Contractor shall complete a television inspection report covering the television inspection work and the information acquired. The television inspection report shall be completed by the Contractor.
- B. A television inspection code sheet shall be used consistently throughout the contract. All electronic data files shall be submitted on CD-ROM, or flash drive, as directed and approved by the City.
- C. Video Data Display: At the start of each storm sewer length being surveyed, the length of pipeline from zero up to the cable calibration point shall be recorded and reported in order to obtain a full record of the storm sewer length. The length reading entered on to the data display at the cable calibration point must allow for the distance from the start of the survey is zero. In the case of surveying through a manhole where a new header sheet is required, the distance shall be set at zero with the camera focused on the outgoing pipe entrance.
- D. Television Inspection Record: AT the start of each manhole length a data generator shall electronically generate and clearly display on the viewing monitor and video recording a record of data in alphanumeric form containing the following minimum information:
  - a. Automatic update of the camera’s position, in feet and tenths, in the storm sewer line from adjusted zero;
  - b. Size and Length of Line, Type of material line composed of, etc.;
  - c. Upstream manhole and downstream drainage structure reference numbers;
  - d. Date of inspection;
  - e. Road name/location;
  - f. Direction of inspection (upstream or downstream);
  - g. Starting time of the inspection;
  - h. Pipe ID references;

Once the survey of the pipeline is under way, specific data should be continuously displayed on the viewing monitor and video recording. The size and position of the data display shall be such as not to interfere with the main subject of the picture yet shall be easily readable when the recording is replayed. At minimum, the following data should be displayed:

Automatic update of the camera’s position, in feet and tenths, in the storm sewer line from adjusted zero; \

Upstream manhole and downstream manhole reference numbers

Each storm sewer length, i.e., the length of the storm sewer between two consecutive drainage structures, shall be entered on a separate coding sheet. Thus, where a Contractor elects to “pull



through” a manhole during a CCTV Survey, he shall start a new coding sheet at the manhole “pulled through” and shall re-set the distance to zero on the coding sheet.

All blind drainage structures and buried drainage structures shall be noted in the inspection report and logged on a separate log with the GPS location and type of structure. The log shall be provided to the City with each pay request.

The videos and corresponding reports shall be submitted to the City on a weekly basis for all work accomplished the previous week.

- E. Laser Inspection Reporting: Laser scan final reporting shall include the pipe’s true diameter, ovality (per ASTM F1216), x/y diameter, and maximum diameter. Segments or areas revealing deflection in horizontal alignment greater than 2% must be identified in the report. Where the presence of flow in the pipeline requires interpolation and estimation calculations to fill data gaps and complete the full circumference view, the method and calculations used to support these assumptions must be presented. Other data sources such as as-built data, if used for these calculations, must be identified in the report. To support identified radial localization of defects, individual ID measurements as computed from the axis of the inspected pipe must be presented in an illustrated ovality and deflection graphs covering the length of the inspection segment. Laser scan results identifying ovality and deflection must be presented in 2-D cross-sections. The color coding is to be identical to the aforementioned requirements. Where the presence of fluids in the pipe necessitates interpolation and estimation, calculations to fill gaps and complete the full circumference view will be performed. The method and calculations used to support these assumptions must be presented. Any high-resolution scan obtained during the inspection are to be provided along with the report in a 3-D point cloud (VRML) format including software for viewing on a PC.

Precision Ovality Scans including but not limited to Sensor Error, Axis Alignment Error, and Processing Errors must be accurate to +/- 1%.

The report shall provide a 2-D representation of an integrated overview identifying concentricity, and deviation from concentricity resulting in ovality and eccentricity, presented in a color-coded format as an unrolled illustration of the pipe condition to include the entire pipe circumference (above the flow line) as well as a cross-section view. The pipe interior is to be flattened into a graphic whose y-axis represents pipe diameter, whose x-axis represents pipe length and whose color represents deviation from expected values indicating a gradation and severity of the deviation from concentricity. Measured pipe internal diameter (ID) that coincides with expected values must be coded in a color that positively identifies and differentiates the measurement of the expected values from actual concentricity measurements

The report shall provide a 3-D representation with variations in pipe wall shown in sharp relief for easy visual analysis for each of the aforementioned 2-D representations.

### **SECTION 3.25.F – SUBMITTALS**

- A. DATA: Data in CD-ROM, or flash drive, format shall be submitted to the City within ten (10) business days from time of inspection. Three (3) hard copies of the inspection report listed above shall be submitted.

- B. CCTV Inspections: The Contractor shall provide videos with audio comments in DVD, or flash drive, format recorded at Standard Play (SP).
- a. Complete storm sewer line segments can be included on the same video (i.e., CCTV inspections for storm sewer line segments shall not be divided among videos).
  - b. The video format shall be an MPEG-1 compressed video, and resolution video format shall be QSIF (Quarter-size Standard Image Format) of 176 x 112 pixels for NTSC video format.
  - c. Two labels are required on each DVD. One label shall be placed on the spine of the DVD Cover and the other on the face of the DVD.
- C. Other Required Submittals: The Contractor shall provide the following backup information to support and document each location that has been cleaned/inspected:
- a. Brief narrative describing scope of work for location and any findings after inspection.
  - b. Maps/GIS Data of each location showing work completed
  - c. Field logs and misc. information generated during field investigation. A log shall be made by the Contractor when each drainage structure-to- drainage structure pipe segment is televised. The log shall include at a minimum:
    - a. Street name with municipal address hundred block number, and any intersecting street
    - b. Location of each point of leakage
    - c. Location of each service connection or other pipe entering the televised line
    - d. Location and degree of offsets
    - e. Location of any damaged sections, and nature of damage
    - f. Location of buried structures or blind junctions
    - g. Location and amount of any deflection in alignment or grade of pipe; also, the total length of pipe sag
    - h. Pipe ID reference number, materials, diameter, and distance between pipe joints
    - i. Date, city, drainage structure-to- drainage structure segment, reference drainage structure ID number
    - j. Name of operator, and inspector
    - k. Direction of flow
    - l. If a reverse-set up
    - m. Video Filename
  - d. Confined space entry form (when required) per industry standards and any applicable federal or state requirements.
  - e. The Contractor shall prepare and submit a list of any encountered defects, obstructions, and blockage locations on a weekly basis. Any locations with defects which appear to require immediate corrective action based on their size and/or type on a daily and weekly basis.
- D. Progress Reports: The Contractor will be required to provide a weekly progress report to the City showing, at a minimum, the status of all locations previously worked on in the prior week. The report shall include the location/address, size of drain line being inspected, date the notice to proceed was issued for the location, the status (complete, ongoing, etc.), and the anticipated completion date. A final overall project report shall also be provided upon completion of all work. A hard copy and CD with PDF copy of all reports within the billing period shall be provided with each invoice submitted and the final report submitted with or prior to the final retainage invoice.

## **SECTION 3.25.G – MEASUREMENT AND PAYMENT**

A. CCTV Inspection of Main Lines (and/or Laterals). Drain line laterals shall be considered any drain line or pipe connecting stubbed or otherwise tied into the main drain line. Laterals may originate from drainage structures or other connecting features to facilitate the flow of stormwater into the primary drainage system. Under no circumstances shall a lateral line be cleaned or inspected on private property or beyond public right-of-way of non-local City street (i.e., federal, federal-aid or state routes) limits. Any cleaning or inspection services performed outside the City approved scope of work, private property, or otherwise specified herein will not be reimbursable and all associated costs contractor responsibility. The connections points for all laterals at the mainline or connecting structure shall be inspected at no direct cost. The limits of lateral lines cleaning and inspection operations for lateral lines connecting a drainage structure to the mainline may end at the drainage structure; however, where feasible the contractor shall point and video record for a sufficient time to obtain a clear view of the lateral system on the private property side (side opposite the mainline) at no additional cost. For lateral lines not connected to a drainage structure the lateral line shall be cleaned and inspected from the connection point to the mainline to the extent feasible on the private property side (side opposite the mainline). If the contractor is unable to reasonably clean or inspection a lateral line beyond the connection to the mainline the contractor shall point and video record for a sufficient time to obtain a clear view of the lateral system on the private property side (side opposite the mainline) at no additional cost. Field reports and video logs shall clearly document distinguish whether the line cleaned or inspected is a mainline or lateral.

a. *Measurement:* CCTV Inspection of existing storm sewer pipe including drainage structures will be measured in place on a linear foot basis to the nearest foot. Measurement will be along the horizontal centerline of the pipe with no deductions for drainage structures and will be from center of drainage structures to center of drainage structures for the actual storm sewer line televised. CCTV of mainlines will include a view of the upstream and downstream drainage structures where possible to indicate the relative condition of said drainage structures. Measurement will be made for a various range of pipeline diameters listed under this item on the Proposal Form.

i. The pipe segment length, with respect to the referenced drainage structure, shall be determined with a meter device, accurate to within  $\pm 2\%$ . Markings on the cable, instruments requiring observation inside a drainage structure, or correction of each reading for the depth of the referenced drainage structure shall not be allowed. Accuracy of the measurement meters shall be checked daily by use of a walking meter, roll-a-tape, or other suitable device.

b. *Payment:* Payment for CCTV inspection of the existing storm sewer pipe and drainage structures will be made for the respective quantities as determined above at the unit price bid in the Proposal Form. This price and payment shall be full compensation for all material, labor, and equipment, required for television set-up, including, storm sewer flow, camera retrieval, hard copy report, electronic report, video recording, measurement, etc.

B. Cleaning of Main Lines (and/or Catch Basin Laterals)

a. *Measurement:* Cleaning of existing storm sewer pipe including drainage structures will be measured in place on a linear foot basis to the nearest foot. Measurement will be

along the horizontal centerline of the pipe with no deductions for drainage structures and will be from center of drainage structures to center of drainage structures for the actual storm sewer line televised. Cleaning of mainlines will include a view of the upstream and downstream drainage structures where possible to indicate the relative condition of said drainage structures. Measurement will be made for a various range of pipeline diameters listed under this item on the Proposal Form.

- i. If cleaning of an entire section cannot be successfully performed from one manhole/catch basin, the equipment shall be set up at the other manhole/catch basin and cleaning again attempted. If successful cleaning still cannot be performed or the equipment fails to traverse the entire manhole-to-manhole or catch basin to catch basin pipe segment, it will be assumed that a major blockage exists, and the cleaning operation will be abandoned. The cleaning operator will note these occurrences in his daily cleaning log. The Contractor will be compensated for cleaning for only the length associated with the portions thereof pipe successfully cleaned should this occur.
- b. *Payment:* Payment for cleaning of the existing storm sewer pipe and drainage structures will be made for the respective quantities as determined above at the unit price bid in the Proposal Form. This price and payment shall be full compensation for all material, labor, and equipment, required for television set-up, including, storm sewer flow, camera retrieval, hard copy report, electronic report, video recording, measurement, etc.

#### C. Heavy Cleaning of Main Lines (and/or Catch Basin Laterals)

- a. *Measurement:* Heavy cleaning of existing storm sewer pipe including drainage structures will be measured in place on a linear foot basis to the nearest foot. Heavy cleaning is defined as making four or more complete passes in the specific line segment being cleaned. Measurement will be along the horizontal centerline of the pipe with no deductions for drainage structures and will be from center of manhole to center of drainage structures for the actual storm sewer line televised. Heavy cleaning of mainlines will include a view of the upstream and downstream drainage structures where possible to indicate the relative condition of said drainage structures. Measurement will be made for a various range of pipeline diameters listed under this item on the Proposal Form.
- b. *Payment:* Payment for heavy cleaning of the existing storm sewer pipe and drainage structures will be made for the respective quantities as determined above at the unit price bid in the Proposal Form. This price and payment shall be full compensation for all material, labor, and equipment, required for television set-up, including, storm sewer flow, camera retrieval, hard copy report, electronic report, video recording, measurement, etc.

### **SECTION 3.25.H – OBSTRUCTIONS AND BLOCKAGES**

- A. The Contractor will notify the City of any obstructions and blockages preventing the Contractor from completing his/her work. The City shall be notified after an attempt for standard cleaning has taken place. The Contractor shall submit a partial inspection report as outlined above in Sections 3.25.E & 3.25.F. The City will review the submittal and provide further guidance to the Contractor on a case-by-case basis. City may authorize “Heavy Cleaning” as outlined herein or approve

additional means, as requested by the contractor. Any additional costs associated with additional services to address obstructions and blockages shall be approved by the City prior to starting work, or incurring any mobilization or material, equipment, and labor costs. Contractor shall submit a request in writing for City approval complete with all necessary supporting backup and detailed estimate inclusive of all material, equipment, labor, and other incidental costs, in addition to any applicable taxes, fees, markup, profit, overhead, insurance, and bond, etc. costs in accordance with City requirements.

- B. If a blockage or obstruction is encountered and conditions allow, the Contractor shall attempt to conduct the inspection and cleaning from the opposite end of the pipe and continue back towards the blockage or obstruction in order to ensure maximum data collection of the pipe segment. Any reverse set-up mobilization costs shall be at no direct pay.
  - a. If a reverse set-up is required because the cleaning or CCTV in the downstream direction could not be completed, a new coding sheet shall be prepared for the start of the reverse set-up cleaning or CCTV. In no instance shall the pipe ID be altered so that the downstream drainage structure reference number is listed first and upstream drainage structure reference number listed. All reverse set-ups shall be logged on a separate log.
- C. It shall be the responsibility of the Contractor to schedule and perform investigations to prevent system overflows. If flows are such that they interfere with the Contractor’s ability to collect accurate data, then the Contractor shall be responsible to schedule his work during low flow periods or to request written permission to perform by-pass pumping around the site. The Contractor may provide by-pass pumping only with specific approval from the City.
- D. Inspection of storm drain infrastructure by means of CCTV equipment shall be performed to determine the location and extent of any obstructions and defects such as offset joints, protruding tees, broken pipe, and other pipe defects. Field logs / reports shall note the existence of any significant defects. Cleaning by the Contractor shall be performed prior to each CCTV inspection on each pipeline to be inspected.

**3. Measurement and Payment Bid Items:**

ITEM NO.	PAY ITEM	PAY UNIT
CSD701-01	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, under 15” diameter	Linear Feet
CSD701-02	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, 15” to 24” diameter	Linear Feet
CSD701-03	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, 27” to 30” diameter	Linear Feet
CSD701-04	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, 36” diameter and above	Linear Feet
CSD701-05	Cleaning of Main Storm Sewer Lines and Laterals, including	Linear Feet

CSD701-06	Drainage Structures, under 15" diameter Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 15" to 24" diameter	Linear Feet
CSD701-07	Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 27" to 30" diameter	Linear Feet
CSD701-08	Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 36" diameter and above	Linear Feet
CSD701-09	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, under 15" diameter	Linear Feet
CSD701-10	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 15" to 24" diameter	Linear Feet
CSD701-11	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 27" to 30" diameter	Linear Feet
CSD701-12	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 36" diameter and above	Linear Feet

### **SECTION 3.25.I – POST REHABILITATION CCTV AND INSPECTION**

In accordance with Section C204 Environmental Protection and Stormwater Pollution Prevention Plan from the General Specifications, the Contractor is responsible for the long-term operation and maintenance of the related best management practices. Post rehabilitation CCTV and inspection is required, at no direct pay, to evaluate the storm sewer's capacity and ensure that the restored pipe is free from debris, obstructions, or foreign material which would have been caused by construction activities of the Contractor. Post rehabilitation CCTV and inspection shall follow the requirements of Sections 3.25.A through Section 3.25.F.

### **SECTION 3.26 – WATERLINE PIPE BURSTING**

These items shall be governed by the requirements of General Specification Section C741 except as modified here-in.

#### **INSTALLATION:**

The installation of the new water main shall conform to the manufacturer's recommendations.

Pipe bursting and fusion equipment shall be operated by personnel with a minimum of 2 years of experience in the installation of the polyethylene pipe 8 inches or greater, using pipe bursting lining technology. The technician shall possess a certificate of training endorsed by the manufacturer of the pipe bursting equipment, a certificate of training endorsed by the manufacturer of thermal fusion equipment in butt fusing of HDPE pipe, and a certificate of training endorsed by the supplier or manufacturer of HDPE electro-fusion fusion couplers to be used in the method. In lieu of certificate, evidence of training may be substituted. The technician's experience and references shall be made available upon request by the Engineer.



Prior to starting the Work, the Contractor shall submit construction sequence and staging plan (inclusive of proposed insertion and receiving pits), traffic control plan, temporary water supply layout, installation details and sketches, shop drawings, equipment catalog data, product specifications, and other pertinent information for the HDPE pipe installation work

After the completion of pipe bursting and installation of all fittings, offsets hydrant leads, valves, and service saddles but prior to the change over of service connections, the Contractor shall complete testing on the new main in accordance with Section C741.05. Following successful testing, the Contractor shall change over service connections from the temporary watermain to the new main.

If plans specify trench method of installation, but the Project Engineer and SWBNO approves Pipe Bursting method: Payment for furnishing and installing New Watermains by Pipe Bursting shall be made at the contract unit price for corresponding C741(51) PVC existing contract item of equal diameter per linear foot.

The Contractor shall reference ASTM Standards:

ASTM F 2620 - Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings

ASTM D 3035 - Polyethylene Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter

ASTM D 3261 - Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing

ASTM D 3350 - Polyethylene Plastic Pipe and Fittings Materials

ASTM F 714 - Standard Specification for Polyethylene Plastic Pipe Based on Outside Diameter

ASTM F 1055 – Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing

#### MEASUREMENT AND PAYMENT:

If plans specify Pipe Bursting as the only acceptable installation method: Payment for furnishing and installing New Watermains by Pipe Bursting shall be made at the contract unit price per linear foot, including fusing main line fittings (bends, tees, etc.), known offsets, temporary services, tie-ins, removal of existing pipe (if any), dewatering pumping as necessary to prevent contamination, excavation of insertion and receiving pits, shoring, backfilling material, hauling and disposal of excavation material, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form. There shall be no direct payment for demolishing and abandoning existing valve manholes.

If plans specify trench method of installation, but the Project Engineer and SWBNO approves Pipe Bursting method: Payment for furnishing and installing New Watermains by Pipe Bursting shall be made at the contract unit price for corresponding C741(51) PVC existing contract item of equal diameter per linear foot, including fusing main line fittings (bends, tees, etc.), known offsets, temporary services, tie-ins, removal of existing pipe (if any), dewatering pumping as necessary to prevent contamination, excavation of insertion and receiving pits, shoring, backfilling material, hauling and disposal of excavation material, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form. There shall be no direct payment for demolishing and abandoning existing valve manholes.

Payment for furnishing and installing New Water Mains by Pipe Bursting shall be made at the contract unit price per linear foot, including fusing main line fittings (bends, tees, etc.), known offsets, fire hydrant leads, tie-ins, removal of existing pipe (if any), minor dewatering, excavation of insertion and

receiving pits, complete shoring, backfilling material, and hauling and disposal of excavation material, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Uniform Bid Form.  
 Payment will be made under:

ITEM NO.	PAY ITEM	PAY UNIT
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If installation method not specified:

C741(51)(C)(1)	8" PVC New Water Main with Main Line Fittings, Linear Foot	
C741(51)(E)(1)	12" PVC New Water Main with Main Line Fittings, Linear Foot	
C741(51)(F)(1)	16" PVC New Water Main with Main Line Fittings, Linear Foot	
C741(51)(H)(1)	20" PVC New Water Main with Main Line Fittings, Linear Foot	
C741(51)(I)(1)	24" PVC New Water Main with Main Line Fittings, Linear Foot	
C741(51)(J)(1)	30" PVC New Water Main with Main Line Fittings, Linear Foot	

If installation is specified in plans as Pipe Bursting:

CSW741(51)(C)(4)	8" HDPE New Water Main with Main Line Fittings by Pipe Bursting, Linear Foot	
CSW741(51)(E)(4)	12" HDPE New Water Main with Main Line Fittings by Pipe Bursting, Linear Foot	

**SECTION 3.27 – NON-STANDARD BID ITEMS**

<u>ITEM NO</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
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CF-3	Sidewalk, Driveway, and Curb Saw Cutting	LF
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CF-4	Pavement Saw Cutting Adjacent to Existing Pavement and at Patches to Utility Trenches	LF
CF-5	Removal of Handicapped Ramps, Curb and Gutter, and Concrete Sidewalks at Intersections Including Saw Cutting	SY
CF-6	ADA-Accessible Curb Ramps, Curb and Gutter,, and Concrete Sidewalks at Intersections	SY
CF-7	4" Concrete Sidewalk (Special Finish)	SY
CF-8	6" Concrete Driveway (Special Finish)	SY
CF-9	6" Concrete Driveway (Special Finish) (Pea Gravel)	SY
CF-10	Root Pruning	EACH
CF-13	Sidewalk Transition Adjacent to Handicapped Ramps.	EACH
CF-14	Surface Applied Tactile / Detectable Warning Surface Tiles	EACH
CF-15	Timber Curb	LF
CF-16	Type-A Dead-End Installation	EACH
CF-301	Vertical Catch Basin Cover	EACH
CF-302	Vertical Catch Basin Frame	EACH
CF-303	Lockable Vertical Catch Basin Frame and Cover	EACH
CF-311	Vertical Catch Basin Front Grate No. 1	EACH
CF-312	Vertical Catch Basin Front Grate No. 2	EACH
CF-313	Vertical Catch Basin Front Grate No. 3	EACH
CF-315	Single Vertical Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings	EACH
CF-316D	Double Vertical Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings	EACH
CF-317	Single Vertical Catch Basin Repair or Vertical Adjustment Brick Work Only	EACH
CF-318D	Double Vertical Catch Basin Repair or Vertical Adjustment Brick Work Only	EACH
CF-331	Drop Inlet Catch Basin Grate	EACH
CF-332	Drop Inlet Catch Basin Frame	EACH
CF-335	Drop Inlet Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings	EACH
CF-336	Drop Inlet Catch Basin Repair or Vertical Adjustment Brick Work Only	EACH
CF-501	Install Temporary Pavement, 2" Thick	SY
CF-351	Mountable Catch Basin Grate	EACH
CF-352	Single or Double Mountable Catch Basin Frame	EACH

CF-353	Lockable Mountable Catch Basin Grate,	EACH
CF-355	Single Mountable Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings	EACH
CF-356D	Double Mountable Catch Basin Repair or Vertical Adjustment Reusing Existing Metal Castings	EACH
CF-357	Single Mountable Catch Basin Repair or Vertical Adjustment Brick Work Only	EACH
CF-358D	Double Mountable Catch Basin Repair or Vertical Adjustment Brick Work Only	EACH
CF-371	Manhole Cover	EACH
CF-372	Manhole Frame	EACH
CF-375	Manhole Repair or Vertical Adjustment up to 6" Reusing Existing Metal Castings	EACH
CF-376	Manhole Repair or Vertical Adjustment over 6" Reusing Existing Metal Castings	Foot Height
CF-377	Manhole Repair or Vertical Adjustment up to 6" Brick Work Only	EACH
CF-378	Manhole Repair or Vertical Adjustment over 6" Brick Work Only	Foot Height
CSD701-01	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, under 15" diameter	LF
CSD701-02	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, 15" to 24" diameter	LF
CSD701-03	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, 27" to 30" diameter	LF
CSD701-04	CCTV Inspection of Main Storm Sewer Lines and Laterals, including Drainage Structures, 36" diameter and above	LF
CSD701-05	Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, under 15" diameter	LF
CSD701-06	Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 15" to 24" diameter	LF
CSD701-07	Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 27" to 30" diameter	LF
CSD701-08	Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 36" diameter and above	LF
CSD701-09	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, under 15" diameter	LF

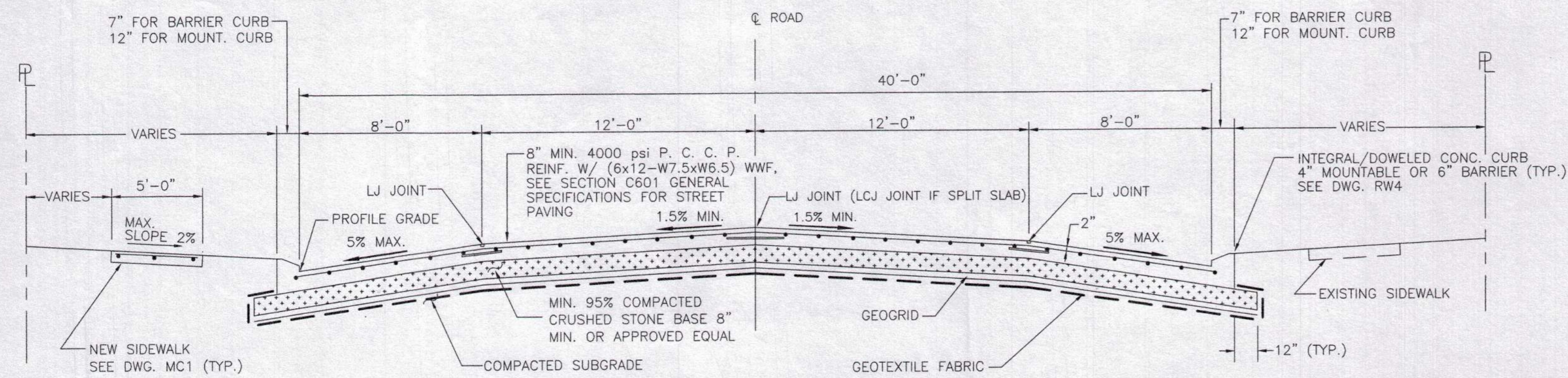
CSD701-10	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 15" to 24" diameter	LF
CSD701-11	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 27" to 30" diameter	LF
CSD701-12	Heavy Cleaning of Main Storm Sewer Lines and Laterals, including Drainage Structures, 36" diameter and above	LF
CSS742(X1)	Install Sewer Mains by Pipe Bursting (Size)	LF
CSS742(X2)	Fuse Service Tee and Drill Pipe to Replace Existing Sewer House Connection from New Main to Back of Curb	EACH
CSS742(X3)	Sewer Point Repair up to Twelve Feet (Size & Depth)	EACH
CSS742(X4)	Sewer Point Repair beyond Twelve Feet (Size & Depth)	LF
CSS742(X5)	Sewer Main Line Cleaning (Size)	LF
CSS742(X6)	Sewer Main Line CCTV Inspection (Size)	LF
CSS742(X7)	Sewer Service Lateral Lining (6" CIPP)	EACH
CSS742(X8)	Manhole Rehabilitation, Cementitious Liner, Partial Depth (2-feet)	EACH
CSS742(X9)	Manhole Rehabilitation, Cementitious Liner, Full Depth	Foot Height
CSS742(X10)	Removal of Cast Iron Flush Valve Apparatus from Sewer Manhole	EACH
CSS742(X11)	Removal of water service line from sewer manhole	EACH
CSS742(X12)	Locate and disconnect flush valve water service line from water main	EACH
CSS742(X13)	Sewer Service Lateral CCTV Inspection	EACH
CSS742(X14)	Well Point System	BLFT
CSW741-01	Repair Water Main with Full Circle Clamp (Pipe Size 4" – 8")	EACH
CSW741-02	Repair Water Main with Full Circle Clamp (Pipe Size 12" – 16")	EACH
CSW741-03	Repair Water Main with Bell Joint Clamp (Pipe Size 4" – 12")	EACH
CSW741-04	Repair Water Main with Bell Joint Clamp (Pipe Size 16" – 24")	EACH
CSW741-05	Repair Water Main by Remove and Replace – Minimum Length 4 FT, Maximum Length 10 FT (Pipe Size 4" – 12")	EACH
CSW741-06	Repair Water Main by Remove and Replace – Minimum Length 4 FT, Maximum Length 10 FT (Pipe Size 16" – 24")	EACH
CSW741-07	Repair Water Main by Remove and Replace – Beyond 10 FT, Maximum 18 FT (Pipe Size	LF

	4" – 12")	
CSW741-08	Repair Water Main by Remove and Replace – Beyond 10 FT, Maximum 18 FT (Pipe Size 16" – 24")	LF
CSW741-09	Replace 5/8" to 1" Lead Service Line Water House Connection with 1" Polyethylene Water House Connection (From Main to Meter)	EACH
CSW741-10	Replace 1.5" Lead Service Line Water House Connection (From Main to Meter)	EACH
CSW741-11	Replace 2" Lead Service Line Water House Connection (From Main to Meter)	EACH
CSW741-12	2" New Water Main with Main Line Fittings	LF
CSW741(51)(C)(4)	8" HDPE New Water Main with Main Line Fittings by Pipe Bursting	LF
CSW741(51)(E)(4)	12" HDPE New Water Main with Main Line Fittings by Pipe Bursting	LF
TS1	Lead Service Line Water House Connection Inspection – Potholing	EACH
TS2	Concrete (Removal & Replacement)	SY
TS3	Asphalt (Removal & Replacement)	SY
TS4	Concrete Curb (Removal & Replacement (With or Without Gutter)	LF
TS5	Granite/Stone Curb (Removal, Storage, & Replacement)	LF
TS6	Concrete Sidewalk (Removal & Replacement)	SY
TS7	Concrete Driveway (Removal & Replacement)	SY
TS8	Brick/Decorative Sidewalk & Driveways (Removal & Replacement)	SY
TS9	Replace 5/8" to 2" Lead Service Line Water House Connection (From Meter to Property line	EA

- END OF SECTION -

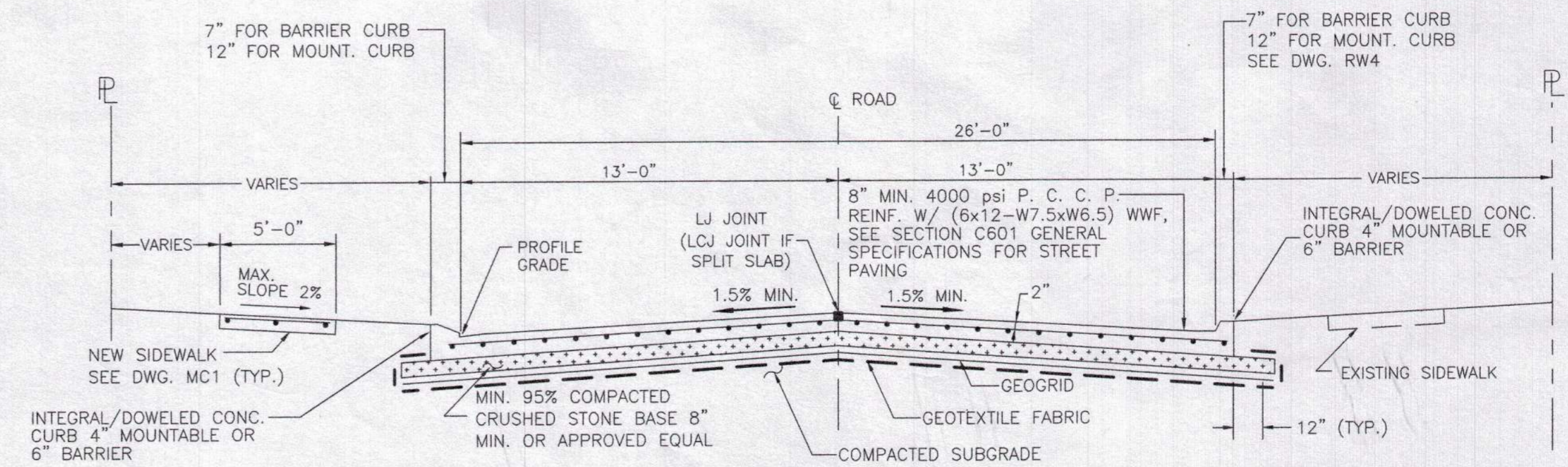
**SECTION 01 300**  
**DPW STANDARD DRAWINGS**





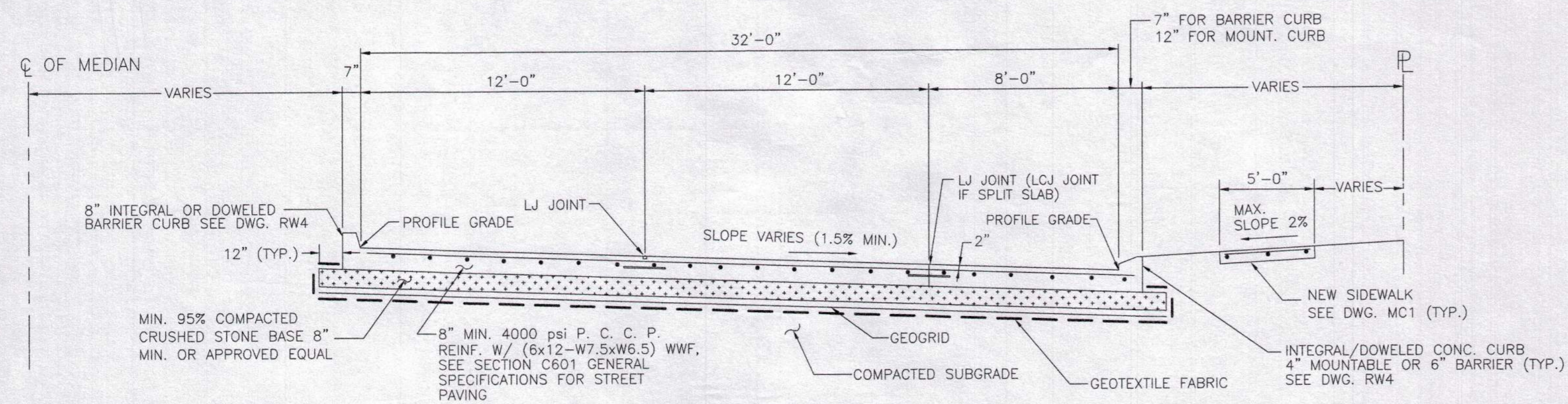
TYPICAL ROADWAY SECTION - 40'-0" RDWY. - P. C. C. P. (REINFORCED)

N.T.S.



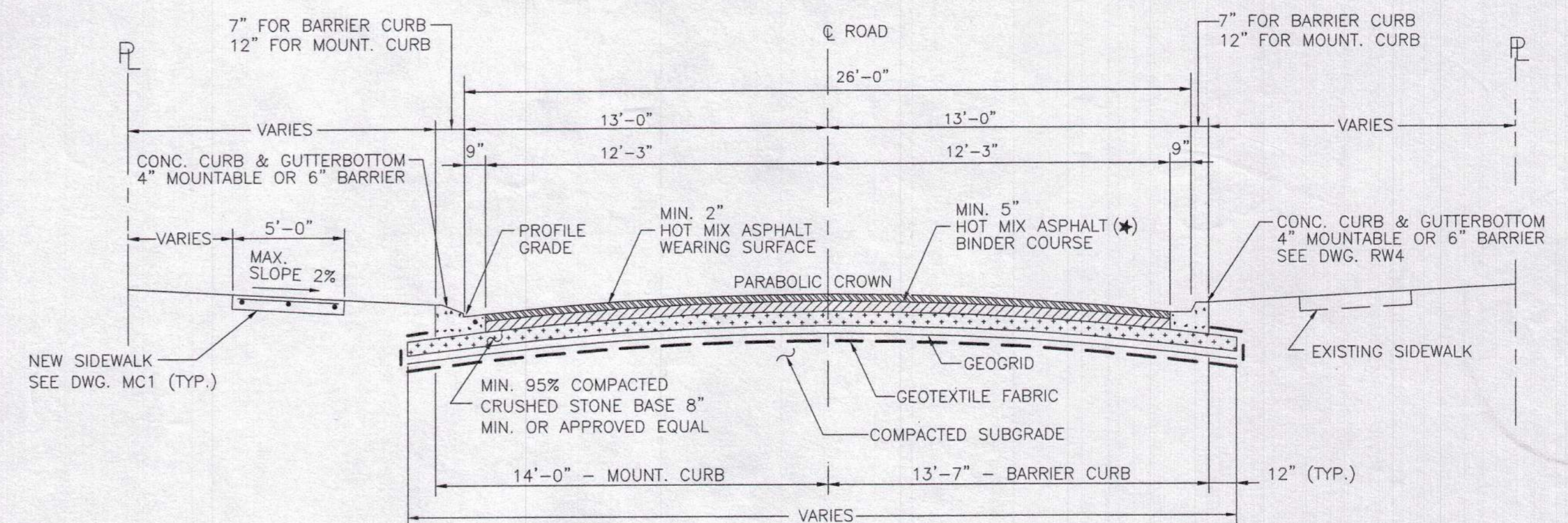
TYPICAL ROADWAY SECTION - 26'-0" RDWY. - P.C.C.P. (REINFORCED)

N.T.S.



TYPICAL HALF SECTION - 32'-0" ROADWAY - P. C. C. P. (REINFORCED)

N.T.S.

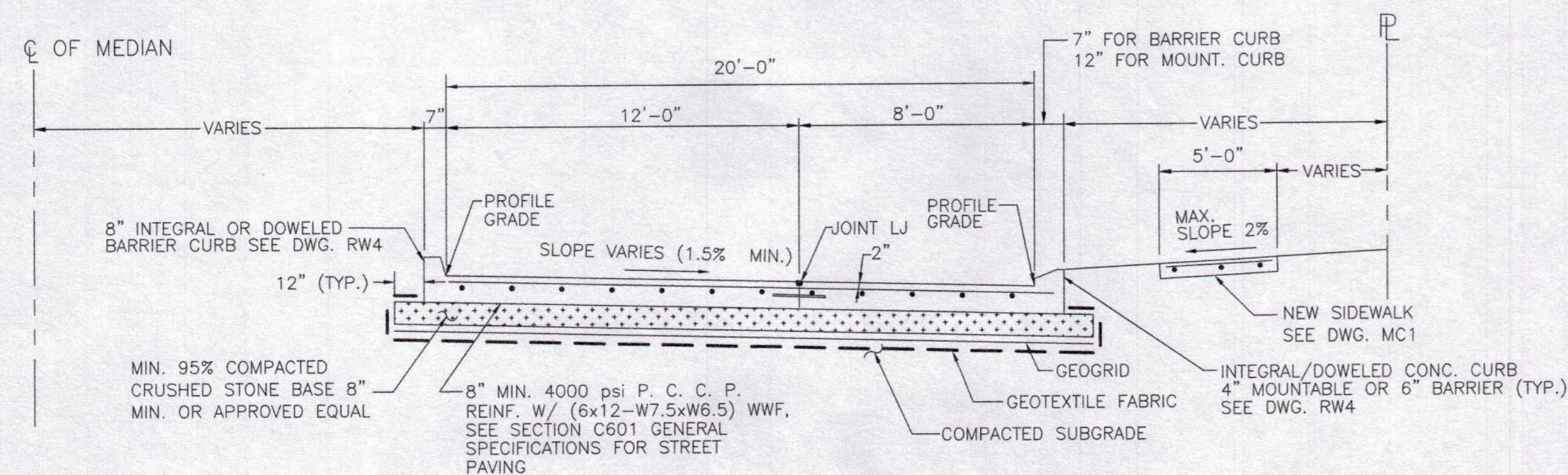


TYPICAL ROADWAY SECTION - 26'-0" RDWY. - ASPHALTIC CONCRETE PAVEMENT

MIN. THICKNESS = 7" TOTAL ASPHALTIC CONCRETE

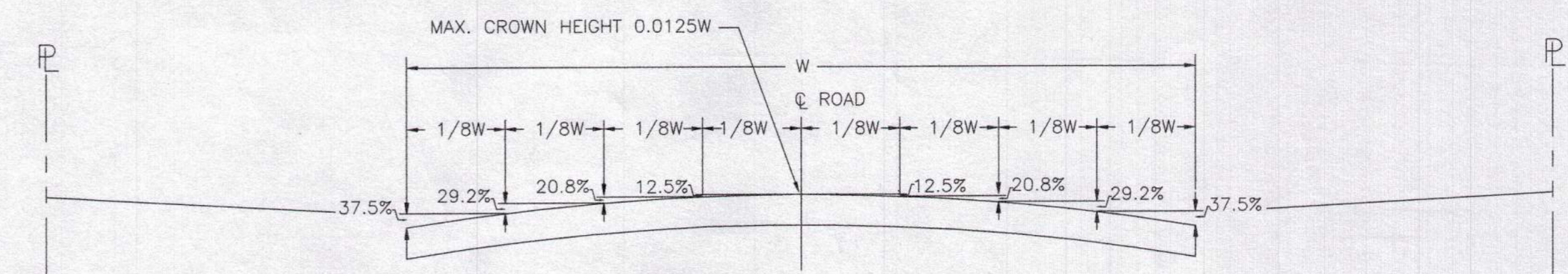
N.T.S.

(\*) PROVIDE TACK COAT(S) BETWEEN ASPHALT LAYER(S)



TYPICAL HALF SECTION - 20'-0" ROADWAY - P. C. C. P. (REINFORCED)

N.T.S.





TYPICAL PARABOLIC CROWN - ASPHALTIC CONCRETE PAVEMENT

N.T.S.

**GENERAL NOTES:**

- (1) NEW SIDEWALK SHALL BE 4" REINFORCED PORTLAND CEMENT CONCRETE 3000 PSI. SIDEWALK SHALL BE 6" REINFORCED P.C.C. AT DRIVEWAYS.
- (2) NEW CURB AND GUTTERBOTTOM SHALL BE 4000 PSI REINFORCED PORTLAND CEMENT CONCRETE.
- (3) SEE DRAWINGS RW2 AND RW3 FOR JOINT DETAILS AND PLACEMENT.
- (4) ROADWAY MAXIMUM SLOPE MUST MEET AASHTO STANDARD.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	TYPICAL ROADWAY SECTIONS FOR STREET CONSTRUCTION		
THE SELECTION AND USE OF THESE DETAILS, WHILE DESIGNED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES, IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A LOUISIANA REGISTERED PROFESSIONAL ENGINEER.	DRAWN BY: N. SCHNEIDER	REVIEWED BY: M.T. B.V. R.S. B.J. A.Y.	RECOMMENDED BY: NGUYEN D. PHAN, CHIEF ENGINEER
	DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JENNISON, DIRECTOR
			DRAWING No. <b>RW1</b>



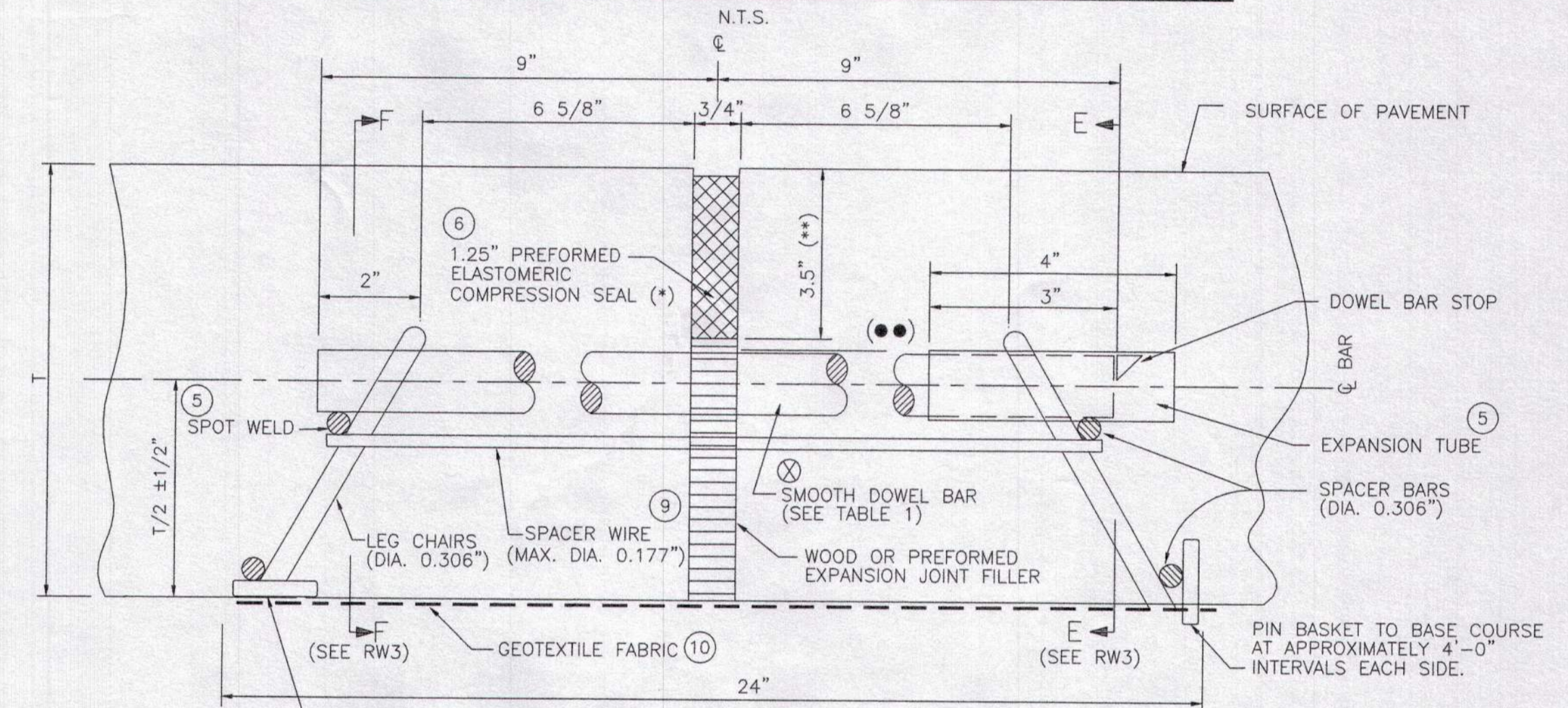
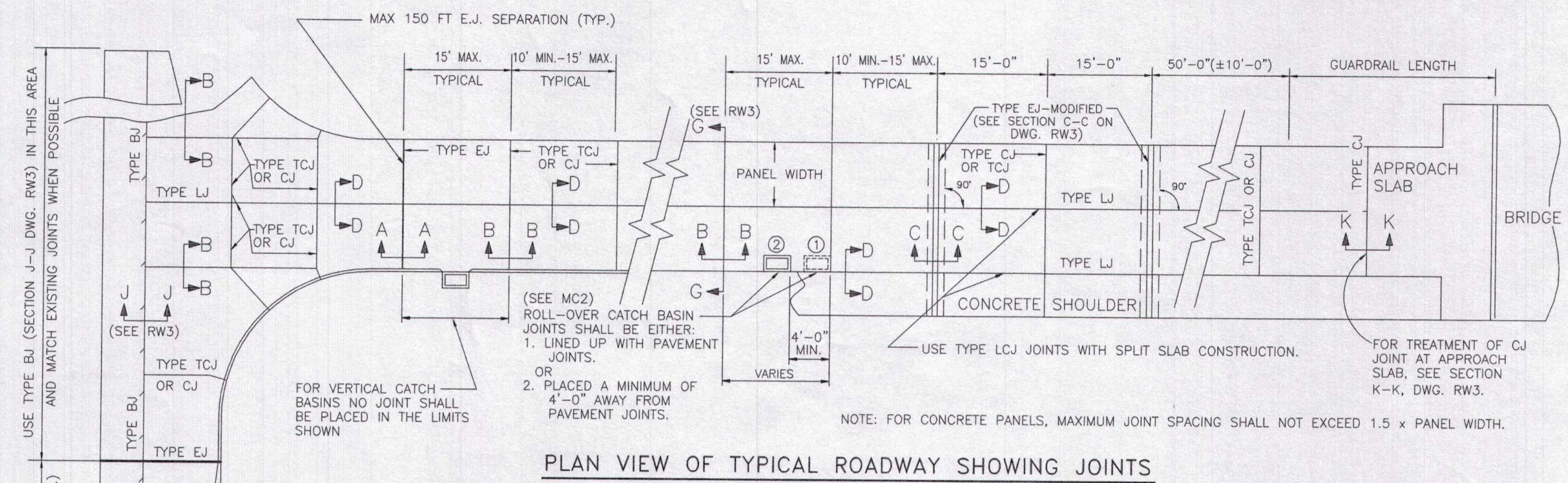
**GENERAL STREET CONSTRUCTION NOTES:**

- 1 PAVEMENT EDGES SHALL BE SLIGHTLY ROUNDED TO APPROXIMATELY 1/4".
- 2 ASPHALTIC CONCRETE JOINING P.C.C.P. OR ASPHALTIC CONCRETE SHOULDER: THE ASPHALT JOINT SHALL BE SAW CUT AND CONSTRUCTED IN ACCORDANCE WITH SECTION I-1, DRAWING RW3.
- 3 FOR SECTIONS C-C, E-E, F-F, G-G, H-H, I-I, J-J, AND K-K SEE DRAWING RW3.
- 4 ALL JOINTS ARE TO BE USED WHERE SHOWN ON THIS SHEET OR AS SHOWN ELSEWHERE IN THE PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER.
- 5 ON TYPE EJ JOINTS, SPOT WELD ALTERNATE ENDS OF DOWEL BARS TO DOWEL BASKETS AND PLACE EXPANSION TUBES ON FREE ENDS OF DOWEL BARS, (SECTION A-A).
- 6 TYPE EJ JOINTS SHALL BE SEALED WITH PREFORMED ELASTOMERIC COMPRESSION JOINT SEALS CONFORMING TO SUBSECTION 1005.03 OF DOTD LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION. THE SEALS SHALL HAVE A NOMINAL WIDTH OF 1-1/4" BEFORE COMPRESSION. JOINTS SHALL BE CLEANED PRIOR TO SEALING.
- 7 FOR DESIGN SPEEDS OF 45 MPH OR GREATER:
  - A. TYPE LJ JOINTS SHALL BE SAW CUT AND CONSTRUCTED AS IN DETAIL "F" DRAWING RW3. THE JOINT SHALL BE SAW CUT AND CLEANED PRIOR TO SEALING WITH A JOINT SEALANT CONFORMING TO SUBSECTION 1005.02(b) OR (c) OF THE AFOREMENTIONED DOTD SPECIFICATIONS.
  - B. TYPE TCJ OR CJ SHALL BE SAW CUT AS SHOWN IN DETAIL "C" OR "D" DRAWING RW3 AND TO THE DEPTH SHOWN IN TABLE 1. THE JOINT SHALL BE SAND BLASTED AND CLEANED IMMEDIATELY PRIOR TO SEALING. THE INITIAL CUT SHALL BE MADE WITH 1/8" MINIMUM BLADE. THE SEALANT SHALL BE A PREFORMED ELASTOMERIC SEAL IN ACCORDANCE WITH SUBSECTION 1005.03 OR A SILICONE SEALANT IN ACCORDANCE WITH SUBSECTION 1005.02(c) OF THE AFOREMENTIONED DOTD SPECIFICATIONS.
- 8 FOR DESIGN SPEEDS OF LESS THAN 45 MPH:
  - A. TYPE LJ JOINTS SHALL BE SAW CUT AS DESCRIBED IN 7(A).
  - B. TYPE TCJ OR CJ SHALL BE CONSTRUCTED AS FOLLOWS:
    - (1) CONSTRUCTED AS DESCRIBED IN 7(B).
    - (2) WITH A REMOVABLE FORMING DEVICE AS SHOWN IN DETAILS "A" AND "B" DRAWING RW3. THE JOINT SHALL BE SAND BLASTED AND CLEANED IMMEDIATELY PRIOR TO SEALING AND MAY REQUIRE SAWING TO ACHIEVE PROPER RESERVOIR DIMENSIONS.
    - (3) WITH A COMBINATION JOINT FORMER/SEALER AS SHOWN IN DETAIL "F" DRAWING RW3. THE SEALER SHALL CONFORM TO SUBSECTION 1005.04 AND BE INSTALLED IN ACCORDANCE WITH SUBSECTION 601.09(c)(3) OF THE AFOREMENTIONED DOTD SPECIFICATIONS AND NO ADDITIONAL SEALANT IS REQUIRED.
- 9 EXCEPT AS NOTED BELOW, DOWEL BARS & TIE BARS SHALL BE HELD IN PLACE BY SUPPORTS SIMILAR TO THE ONES SHOWN, OR APPROVED EQUALS. APPROVED MECHANICAL PLACEMENT OF DOWEL BARS AND TIE BARS WILL BE ALLOWED WITH ALL PAVING METHODS. WHEN DOWEL BAR BASKETS ARE USED, APPROXIMATELY THE CENTER 7" OF SPACER WIRES, THAT SPANS ACROSS THE JOINT, SHALL BE CLIPPED AND REMOVED AFTER STAKING BASKETS IN PLACE.
- 10 INSTALL GEOTEXTILE FABRIC UNDER ALL TCJ, CJ, AND EJ JOINTS WHEN CONCRETE PAVEMENT IS PLACED ON UNSTABILIZED OR UNTREATED BASE COURSES OR SUBBASES. WHEN DOWEL BARS ARE MECHANICALLY IMPLANTED, THE GEOTEXTILE FABRIC SHALL BE ANCHORED TO THE BASE COURSE WITH PINS.
- 11 WHEN CONSTRUCTING CONCRETE CURB AND GUTTER ADJACENT TO NEW P.C.C. PAVEMENT, USE TYPE LCJ JOINT. WHEN ADJACENT TO EXISTING P.C.C. PAVEMENT, USE TYPE LBJ JOINT. THE FIRST LOAD TRANSFER DEVICE SHALL BE INSTALLED 18" FROM THE PAVEMENT EDGE.
- 12 TRANSVERSE EXPANSION JOINTS SHALL NOT BE USED FOR CONSTRUCTION JOINTS.
- 13 CONCRETE SHOULDERS:
  - A. CONSTRUCT TCJ JOINTS IN ACCORDANCE WITH SECTION B-B.
  - B. CONSTRUCT LCJ JOINTS IN ACCORDANCE WITH TYPE LCJ DETAIL ON THIS SHEET AND LJ JOINTS IN ACCORDANCE WITH SECTION D-D.
  - C. USE THE MAXIMUM SHOULDER THICKNESS WHEN DETERMINING DOWEL BAR AND TIE BAR SIZES IN TABLE 1.
  - D. WHEN SKEWED JOINTS ARE USED ON MAINLINE PAVING THE SHOULDER TCJ JOINTS MAY BE SKEWED OR CONSTRUCTED AT 90°.
  - E. SHOULDER JOINTS AND JOINT MATERIALS WILL MATCH THE MAINLINE.
  - F. HEIGHT OF DOWEL BASKETS WILL BE BASED ON THE SHOULDER THICKNESS. ALSO VARYING HEIGHT DOWEL BASKETS WILL BE ALLOWED.
- 14 TIE BARS SHALL NOT BE PLACED WITHIN 18" OF CONTRACTION OR EXPANSION JOINTS.
- 15 FOR REINFORCED STEEL, SEE DOTD SPECIFICATIONS SECTION 1009

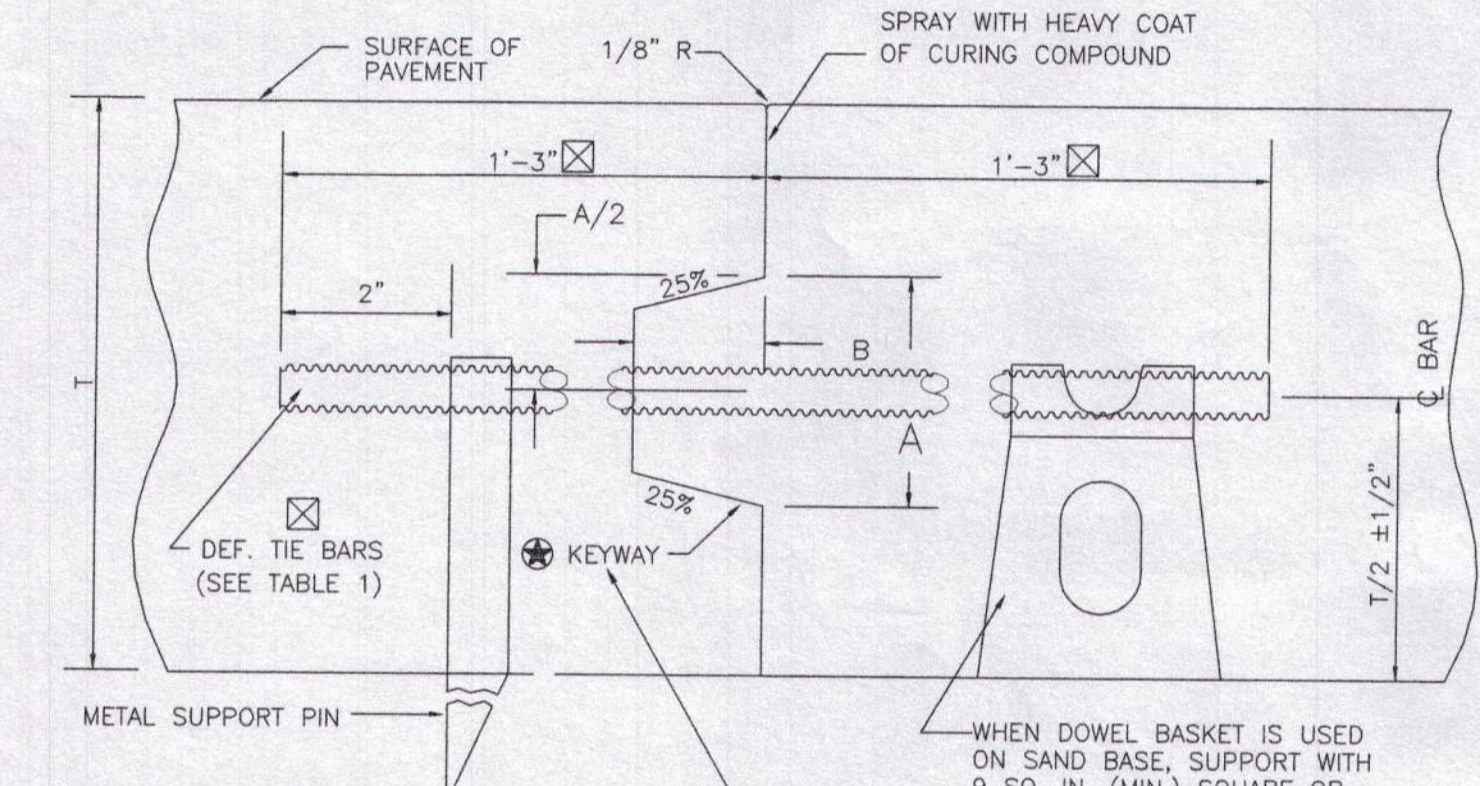
**TABLE 1**  
(ALL DIMENSIONS IN INCHES)

PAVEMENT THICKNESS T	SMOOTH DOWEL BARS			DEF. TIE BARS			MINIMUM DEPTH OF JOINT		KEYWAY	
	SIZE	LENGTH	SPACING	SIZE	LENGTH	SPACING	TCJ & CJ ±1/4"	LJ ±1/4"	A ±1/4"	B ±1/4"
7 OR LESS	1	18	12	1/2	24	24	2-1/2	2-1/2	ALLOW 7"	
8	1-1/4	18	12	1/2	24	24	3	3	2-1/2	1-1/4
9	1-1/4	18	12	1/2	24	24	3	3-1/2	2-1/2	1-1/4
10	1-1/2	18	12	1/2	24	24	3-1/2	4	2-1/2	1-1/4
11	1-1/2	18	12	5/8	30	24	3-1/2	4	2-1/2	1-1/4
12	1-1/2	18	12	5/8	30	24	4	4-1/2	3	1-1/2
13	1-1/2	18	12	5/8	30	24	4	4-1/2	3	1-1/2
14	1-1/2	18	12	5/8	30	24	4-1/2	5	3	1-1/2

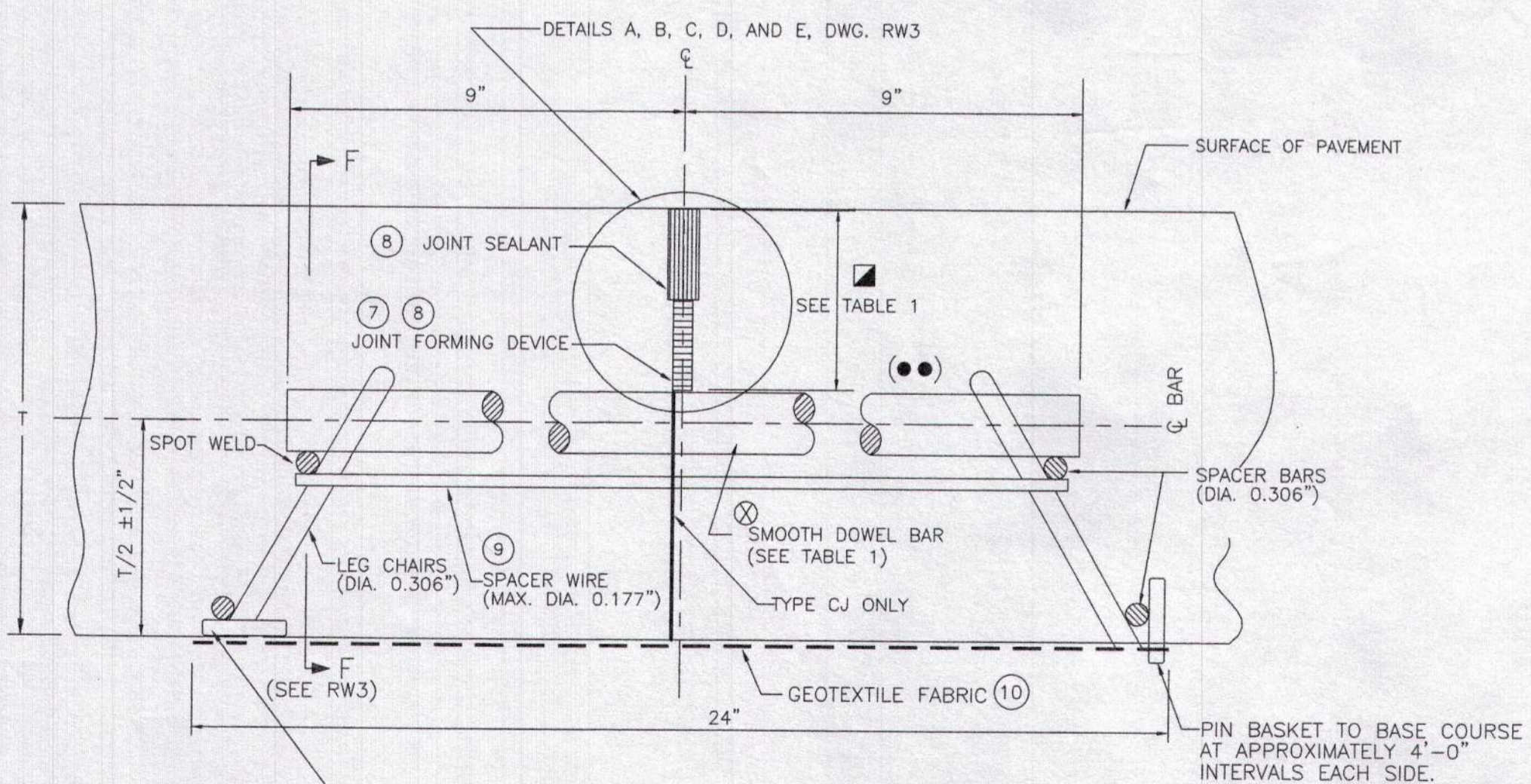
⊗ FOR CONC. SHOULDERS, "T" IS THE THICKNESS AT PAVEMENT EDGE.



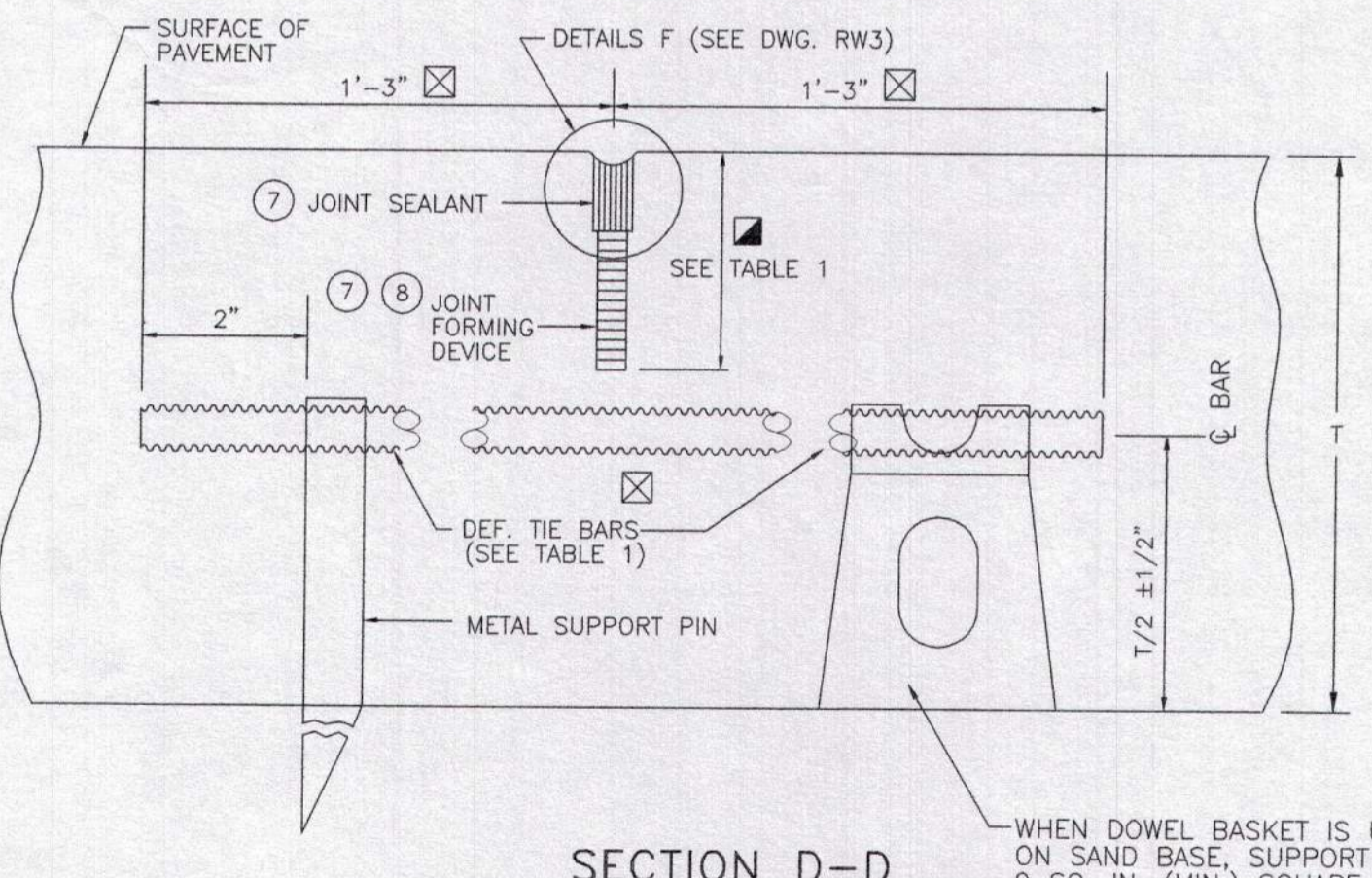
**SECTION A-A**  
**TYPE EJ**  
(TRANSVERSE EXPANSION JOINT)  
N.T.S.



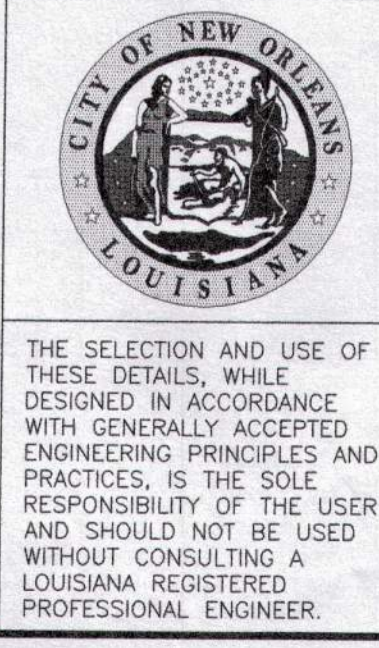
**TYPE LCJ**  
(LONGITUDINAL CONSTRUCTION JOINT)  
N.T.S.



**SECTION B-B**  
**TYPE TCJ OR CJ**  
(TRANSVERSE CONTRACTION JOINT OR TRANSVERSE CONSTRUCTION JOINT)  
N.T.S.



**SECTION D-D**  
**TYPE LJ**  
(LONGITUDINAL JOINT)  
(REQUIRED WHEN PAVEMENT WIDTH EXCEEDS 15')  
(SEE NOTE 7)  
N.T.S.

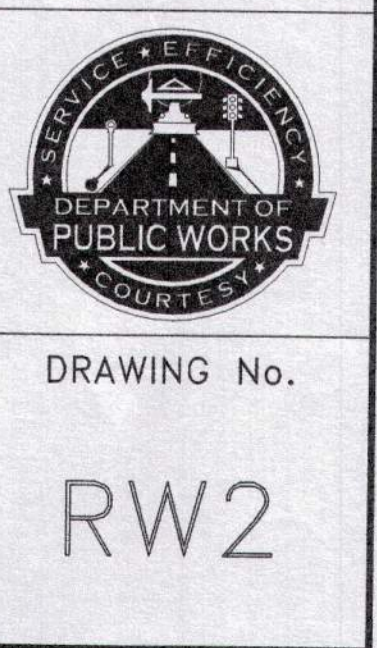


CITY OF NEW ORLEANS  
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ENGINEERING DIVISION

**TYPICAL ROADWAY SECTIONS FOR STREET CONSTRUCTION**

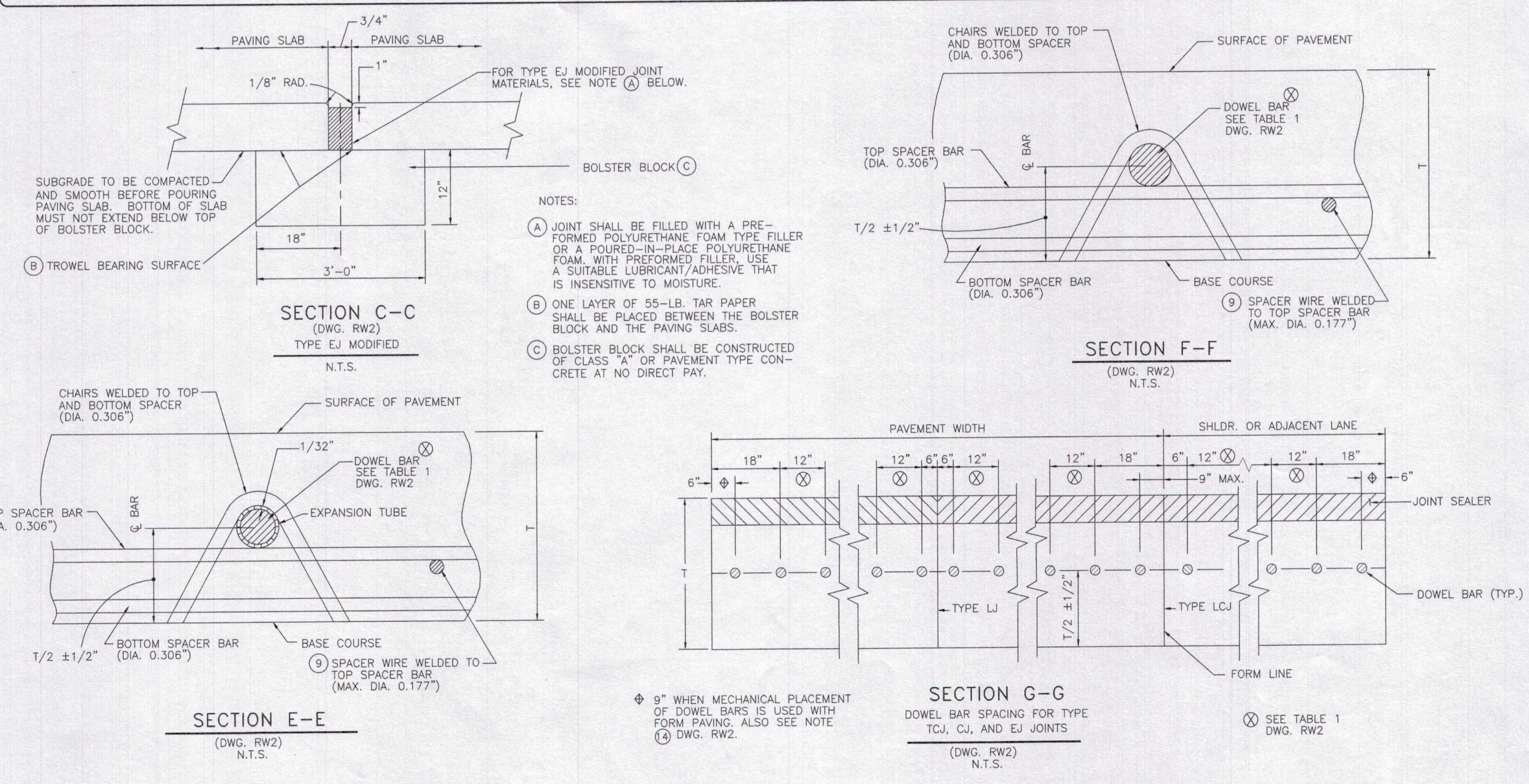
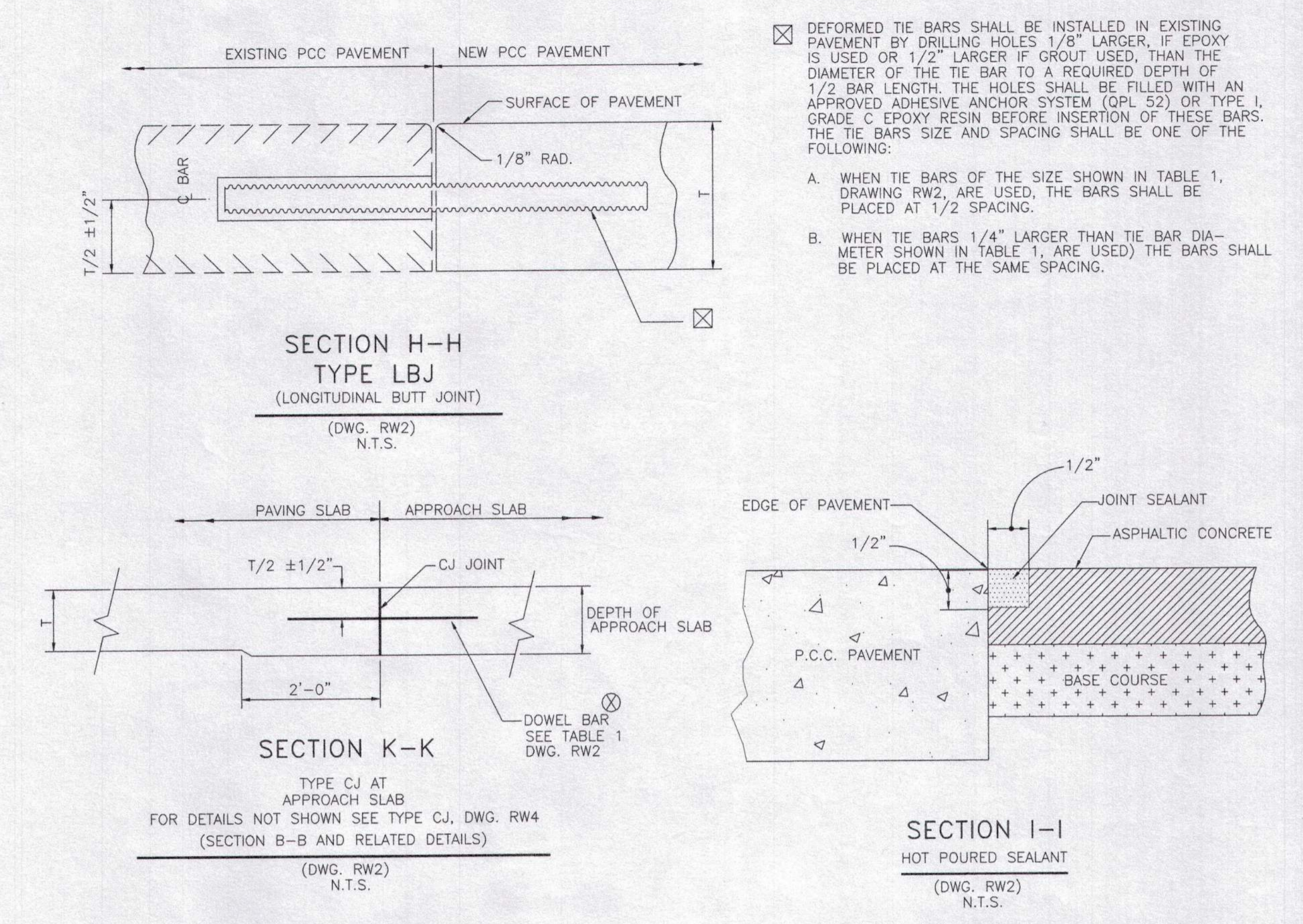
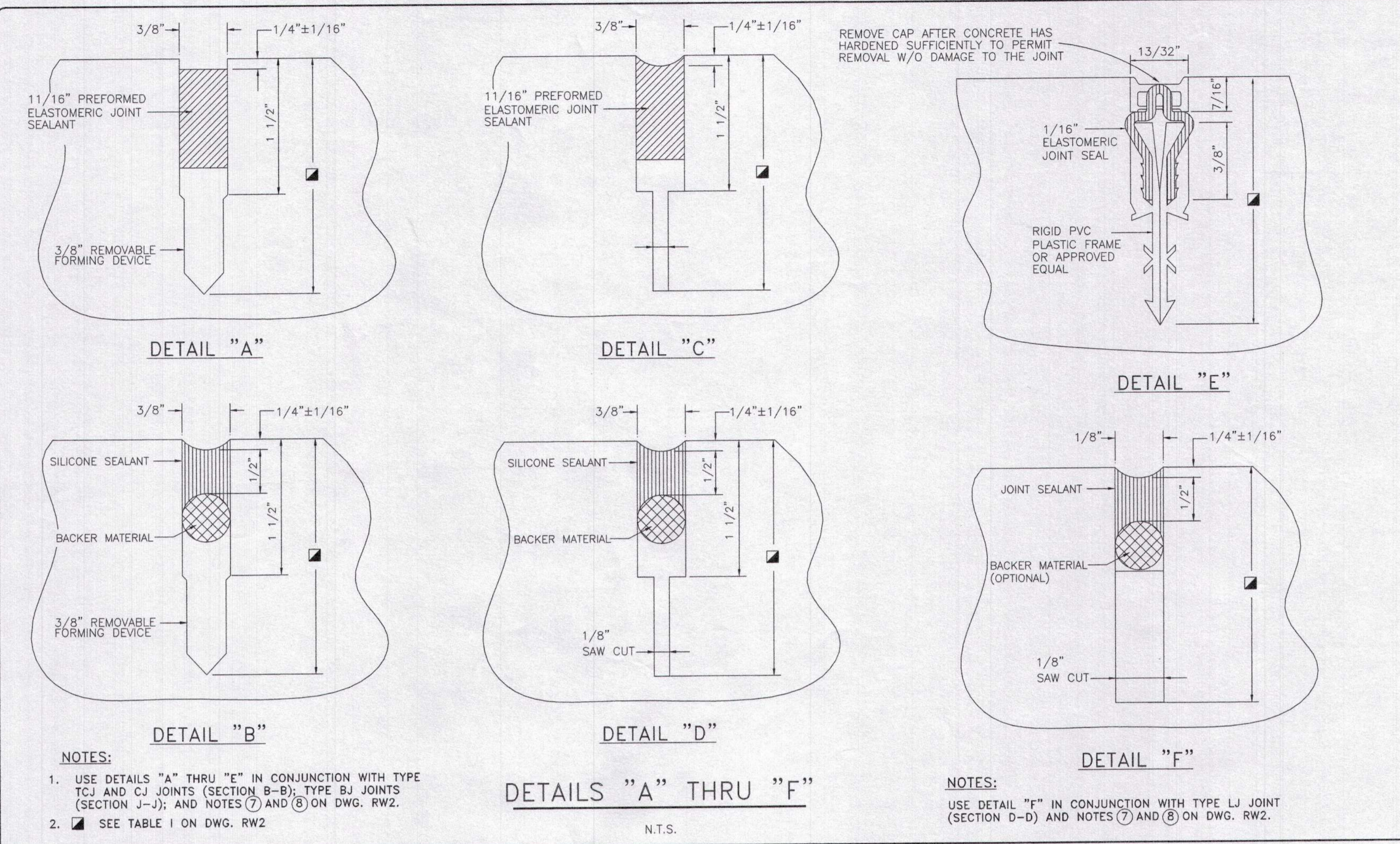
DRAWN BY: N. SCHNEIDER  
REVIEWED BY: M.T. B.V. R.S. B.J. A.Y.  
RECOMMENDED BY: NGUYEN D. PHAN, CHIEF ENGINEER

DATE: 2/3/2015  
SCALE: AS NOTED  
APPROVED: MARK E. JEROME, DIRECTOR



DRAWING No.  
**RW2**

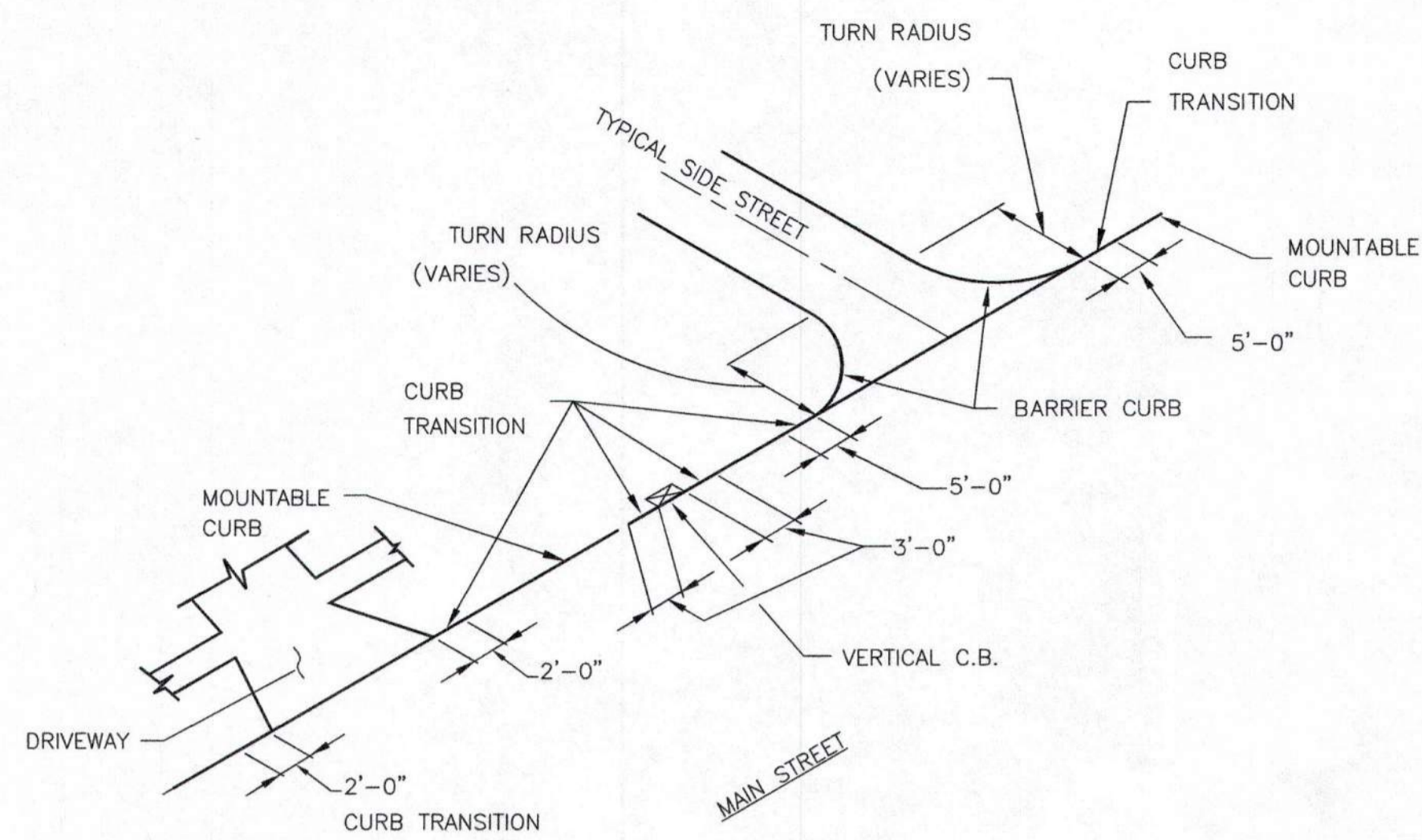




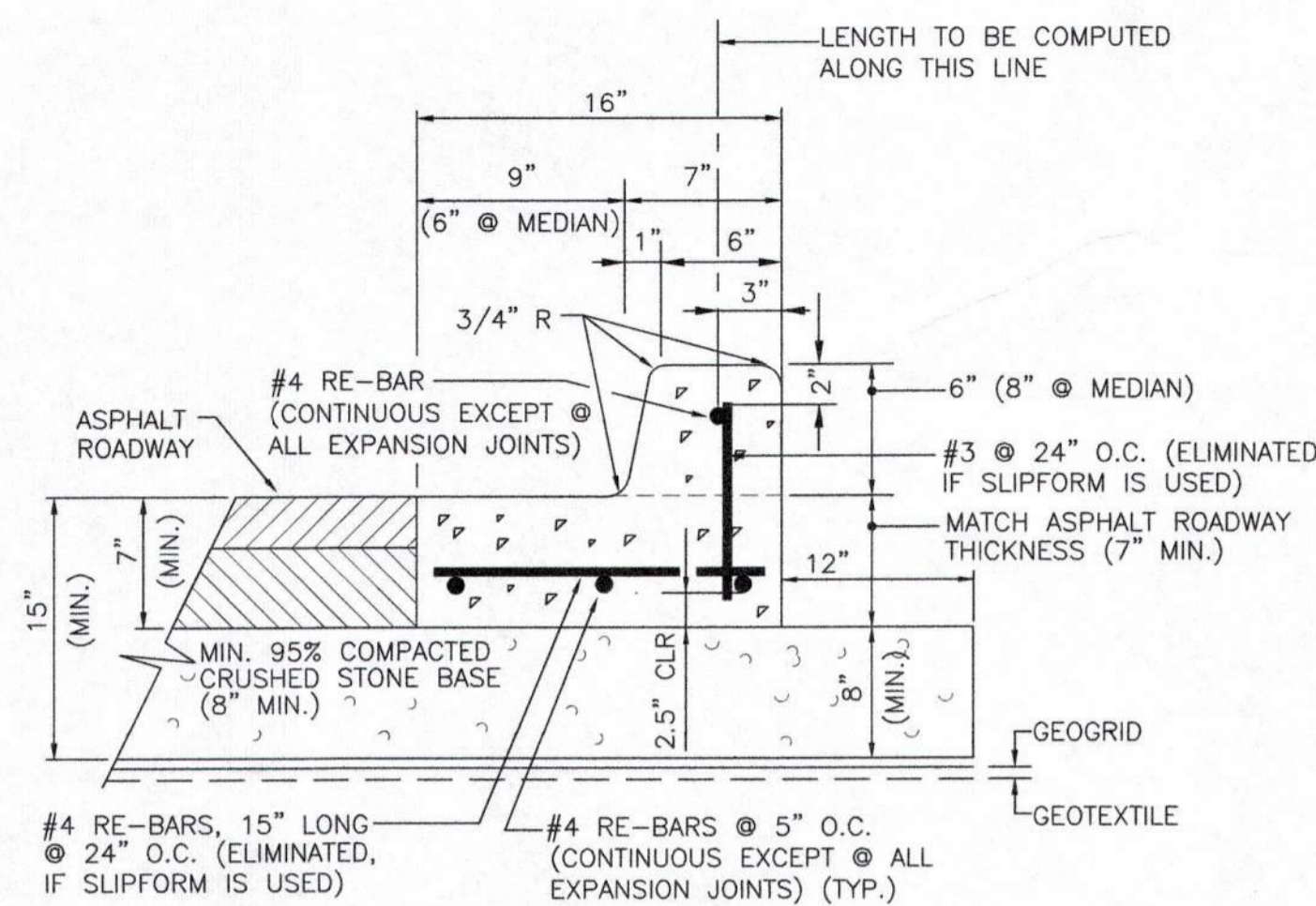
	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	TYPICAL ROADWAY SECTIONS FOR STREET CONSTRUCTION		
DRAWN BY: N. SCHNEIDER	REVIEWED BY: M.T. B.V. R.S. B.J. A.Y.	RECOMMENDED BY: N. PHAN NGUYEN D. PHAN, CHIEF ENGINEER	DRAWING No. <b>RW3</b>
DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JERNIGAN, DIRECTOR	

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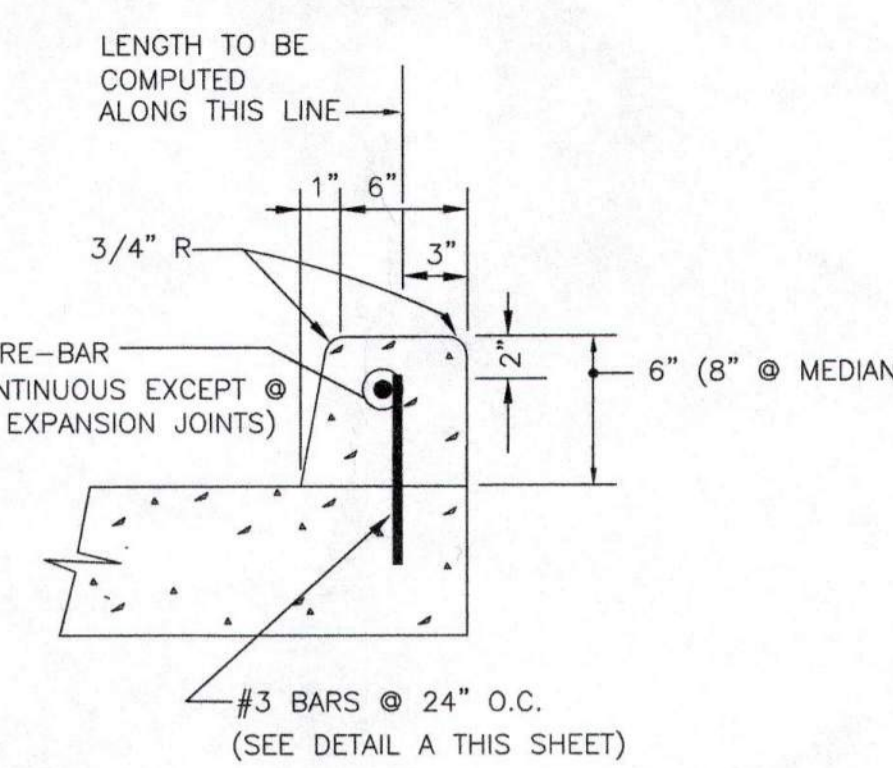




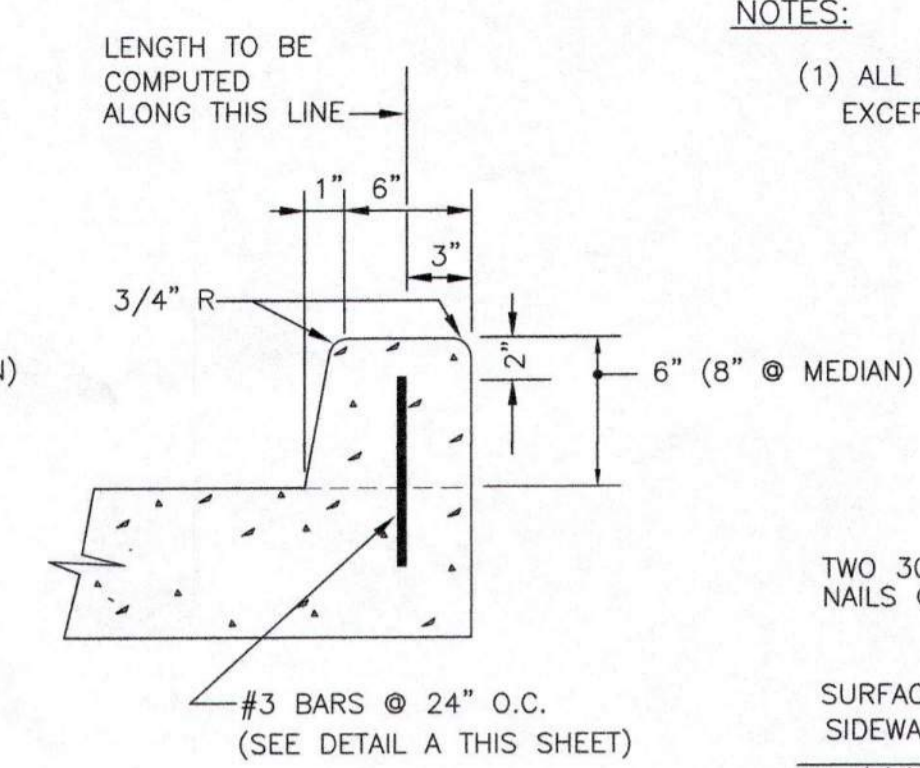
**LOCATIONS OF CURB TRANSITION**  
N.T.S.



**BARRIER CURB & GUTTERBOTTOM**  
N.T.S.

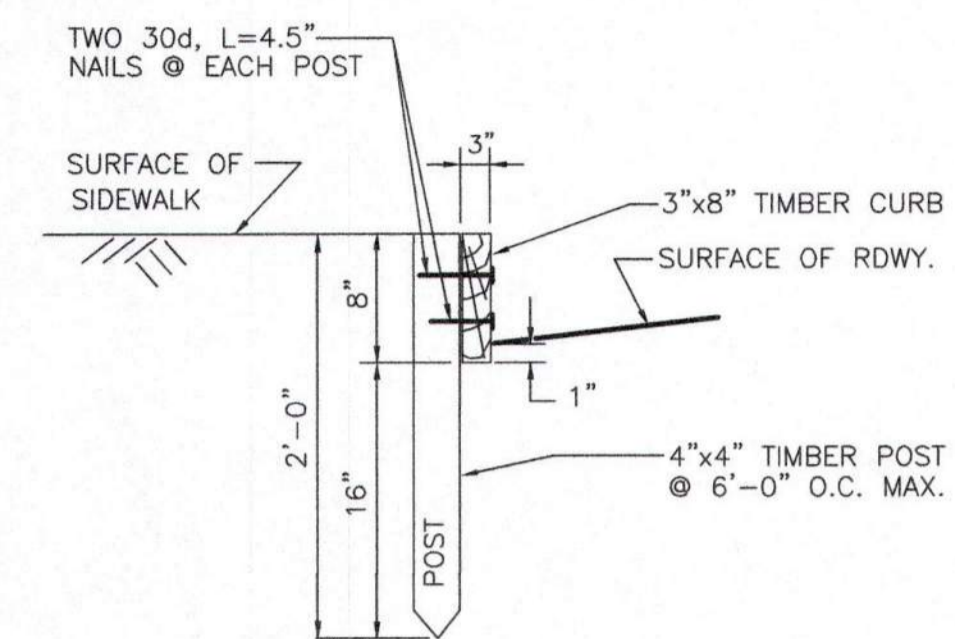


**DOWELED BARRIER CURB**  
N.T.S.



**INTEGRAL BARRIER CURB**  
N.T.S.

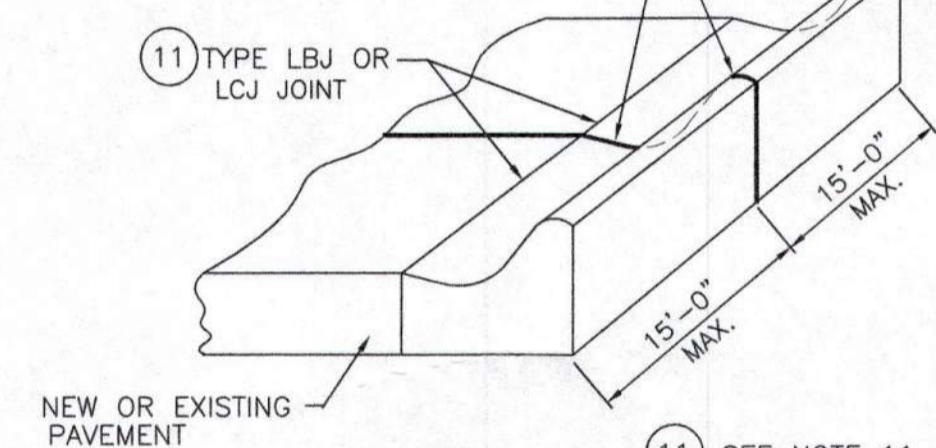
**NOTES:**  
(1) ALL CONCRETE GUTTERBOTTOM AND CURBS TO BE 4000 PSI EXCEPT AS OTHERWISE INDICATED.



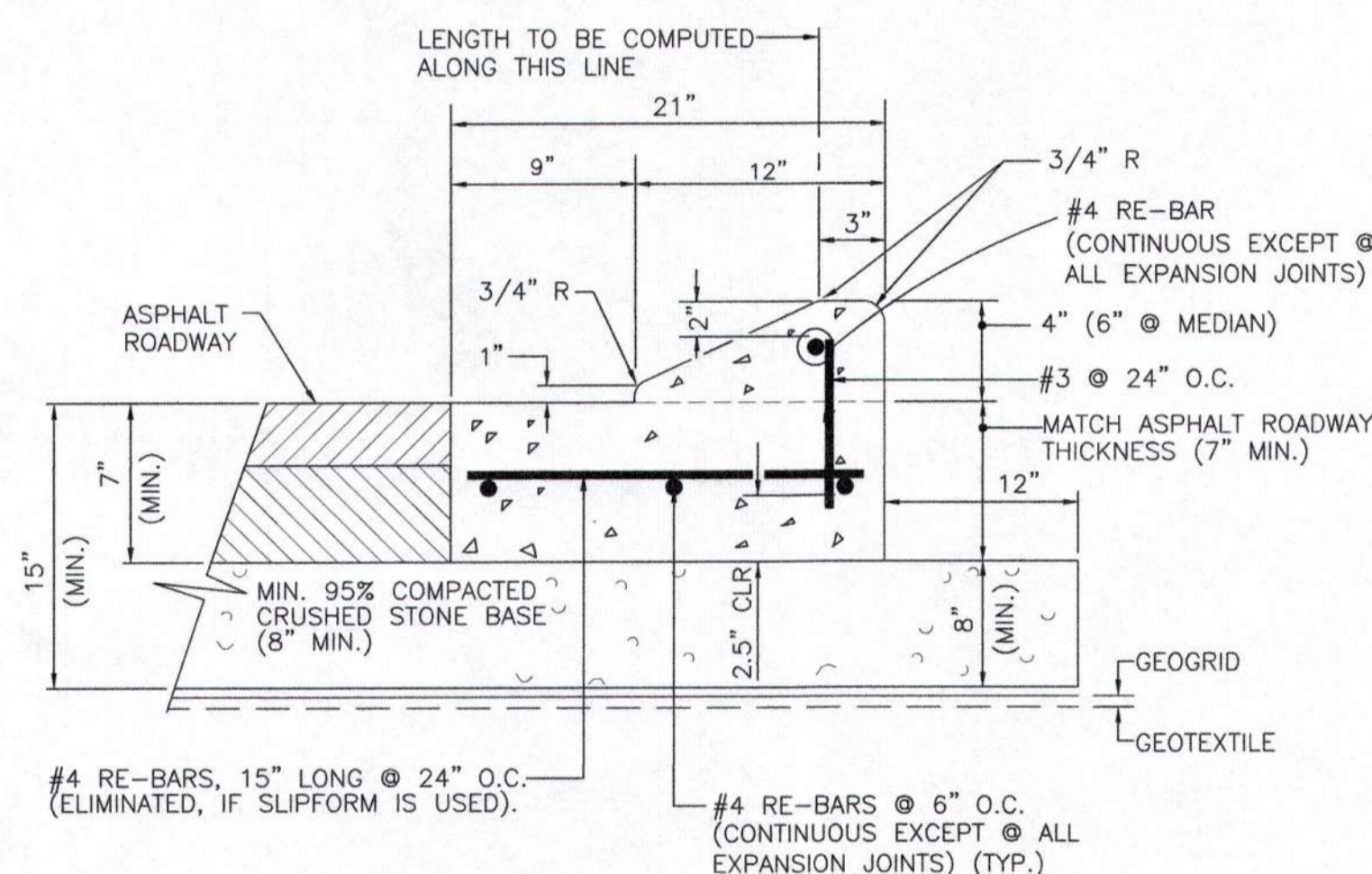
**NOTE:**  
TIMBER TO BE TREATED NO. 1 COMMON PINE (12 LBS./CF.)

**TYPICAL SECTION OF TIMBER CURB**  
N.T.S.

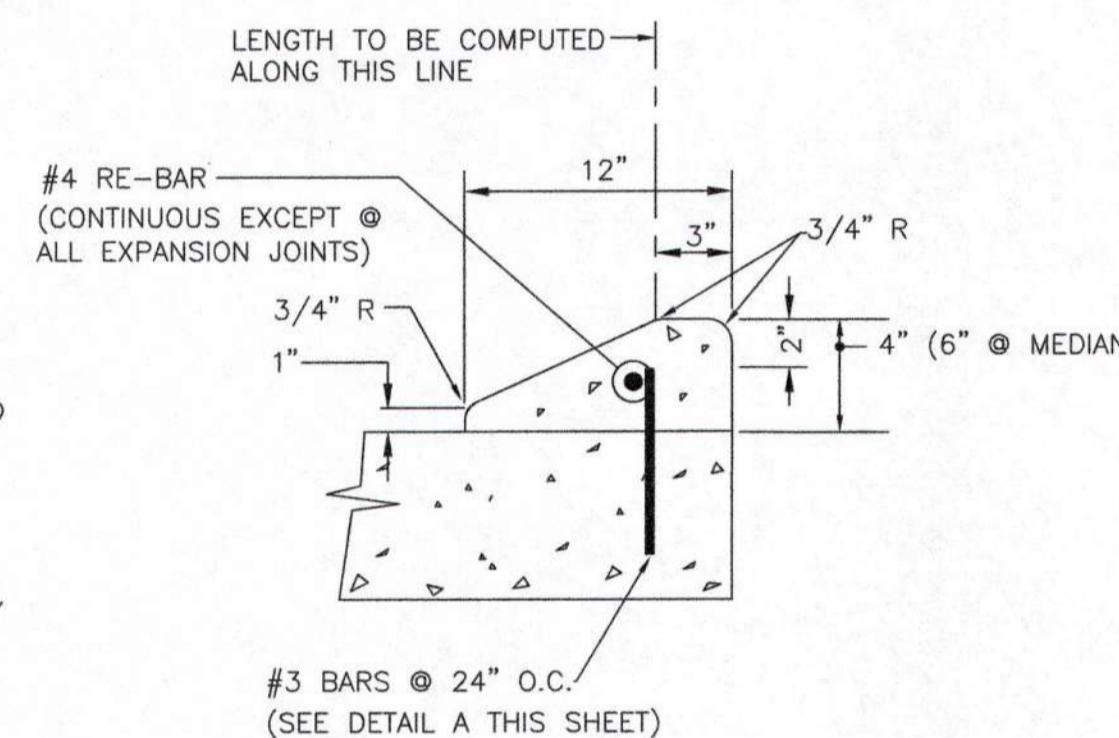
WHEN SLIP-FORM SYSTEM IS USED THIS FACE TO BE TROWEL CUT TO A DEPTH OF 3" (APPROX.), THEN SCORED WITH A 1" SCORING TOOL AT 20'-0" MAX. INTERVALS OR TO MATCH ROADWAY JOINTS.



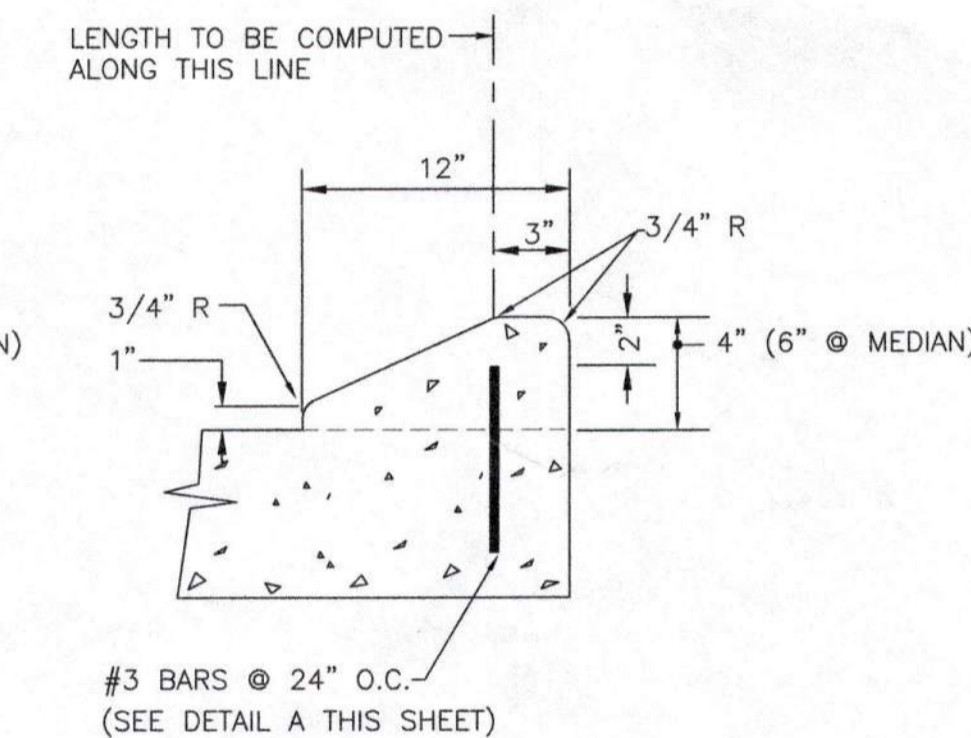
**DETAIL SHOWING JOINTS IN CONCRETE CURB AND GUTTER**  
N.T.S.



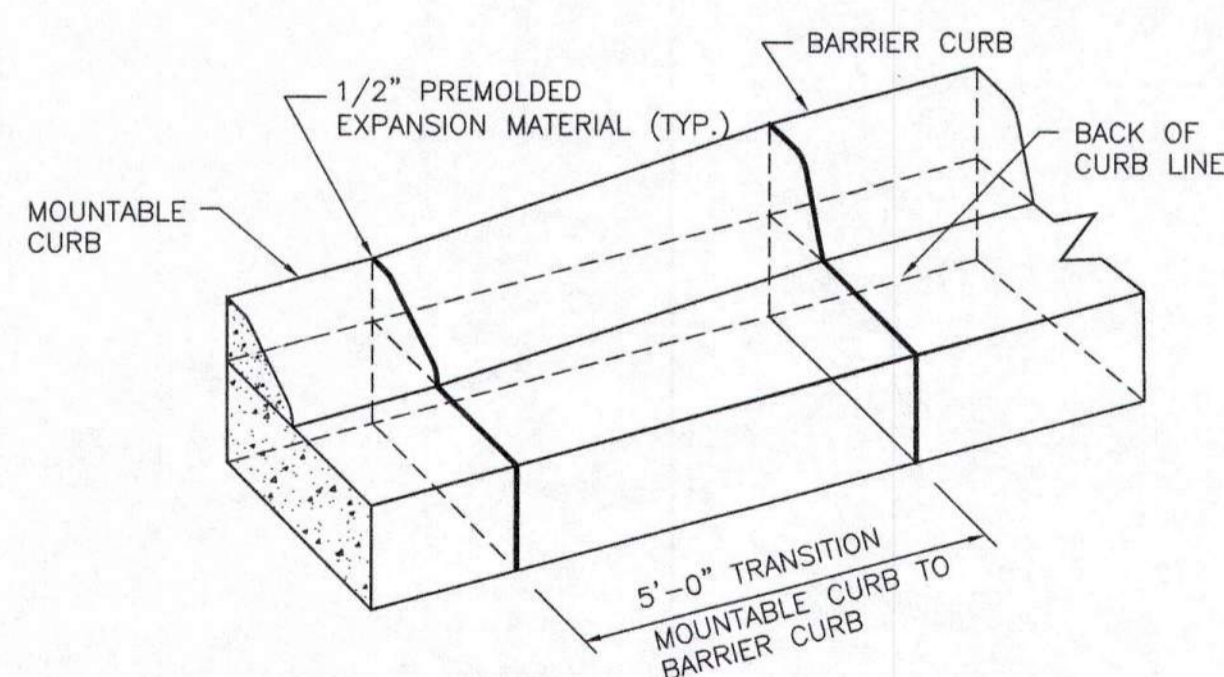
**MOUNTABLE CURB & GUTTERBOTTOM**  
N.T.S.



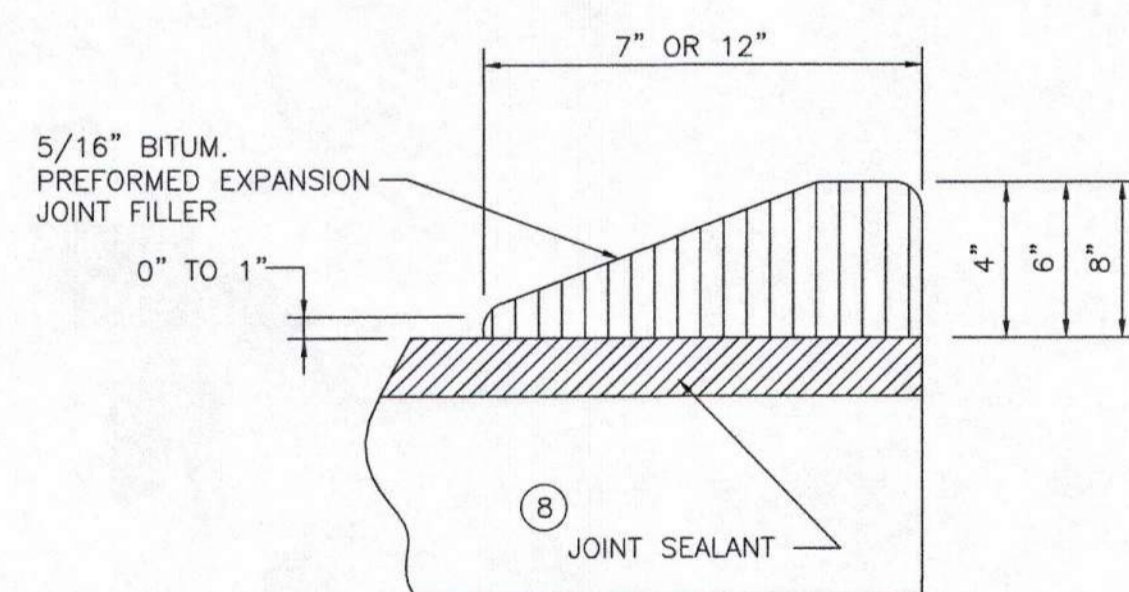
**DOWELED MOUNTABLE CURB**  
N.T.S.



**INTEGRAL MOUNTABLE CURB**  
N.T.S.



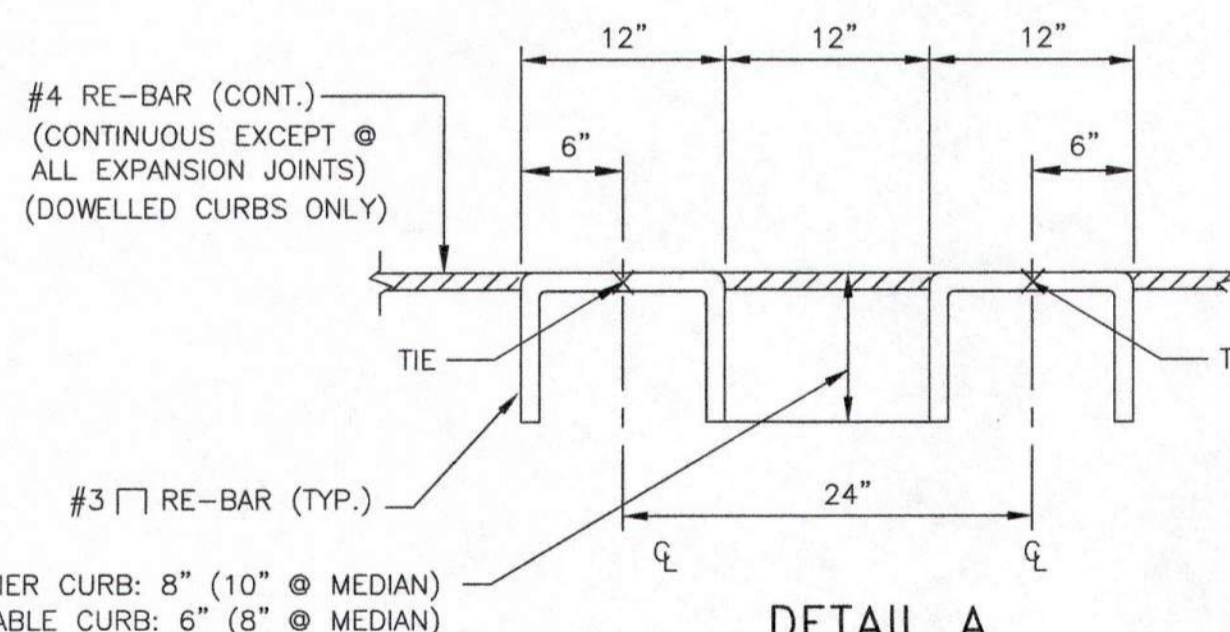
**MOUNTABLE-BARRIER CURB TRANSITION**  
N. T. S.



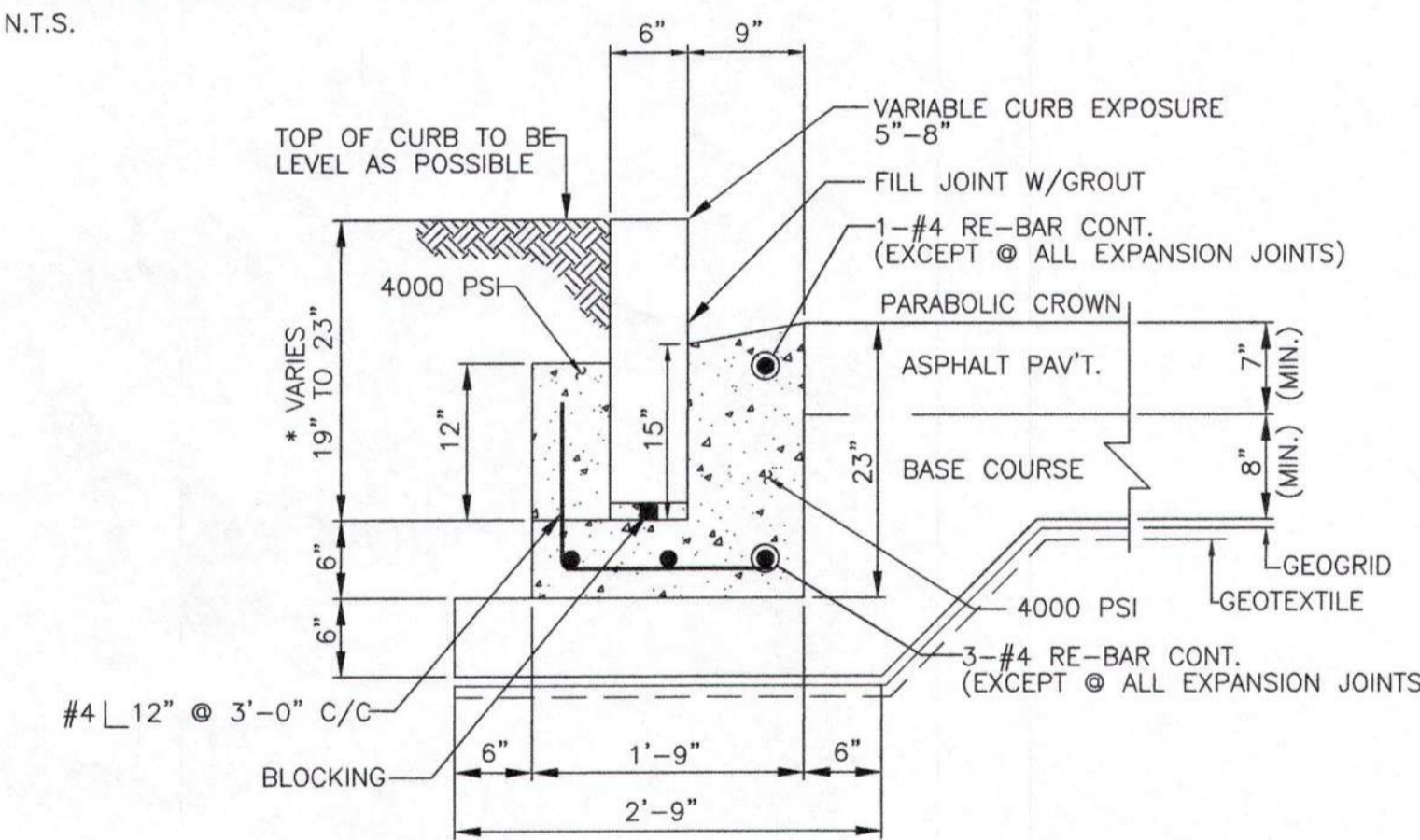
**NOTE:**  
WHEN CURB IS POURED MONOLITHICALLY WITH PAVEMENT, THE BITUMINOUS PREMOLDED EXPANSION JOINT FILLER SHALL EXTEND TO BOTTOM OF JOINT INSERT.

(8) SEE NOTE 8 ON DWG RW2

**JOINT FILLER DETAIL FOR INTEGRAL CONCRETE CURB (MOUNTABLE OR BARRIER TYPE)**  
(MOUNTABLE CURB IS SHOWN)  
N.T.S.



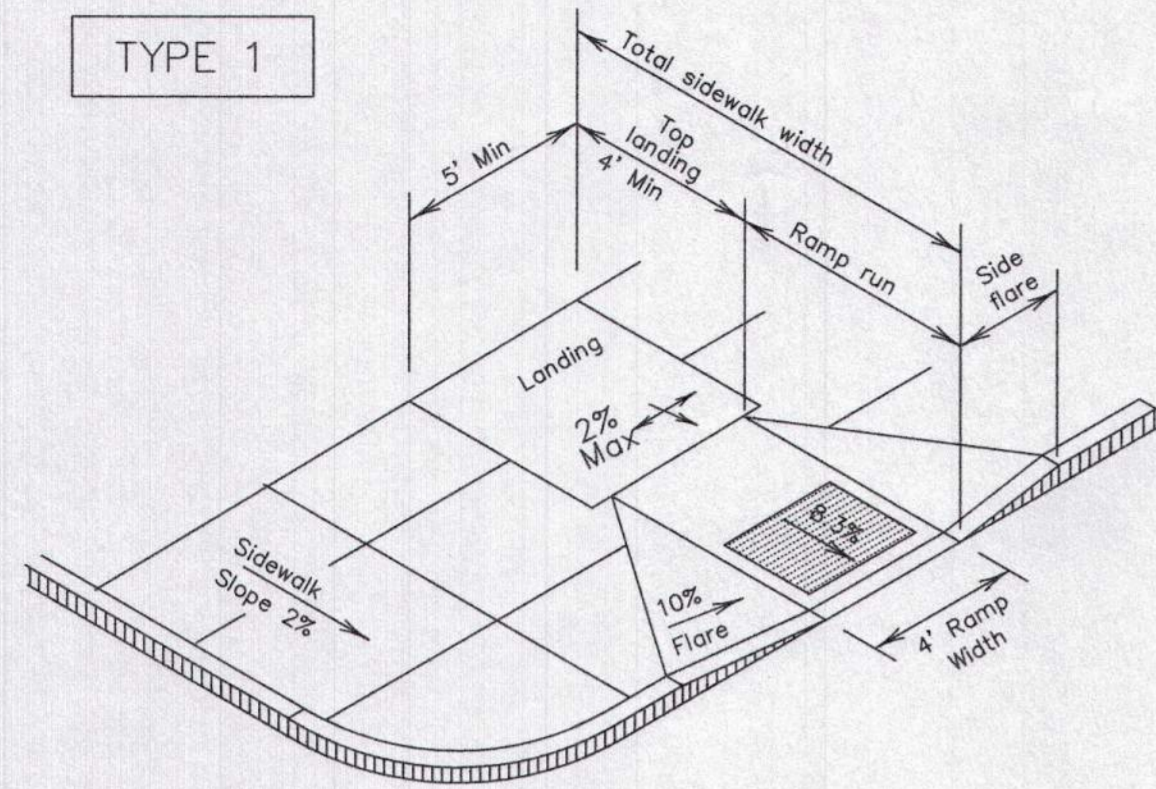
**DETAIL A**  
SHOWING DIMENSIONS AND SPACING OF DEF. REINF. STEEL BARS FOR CONC. CURB  
N.T.S.



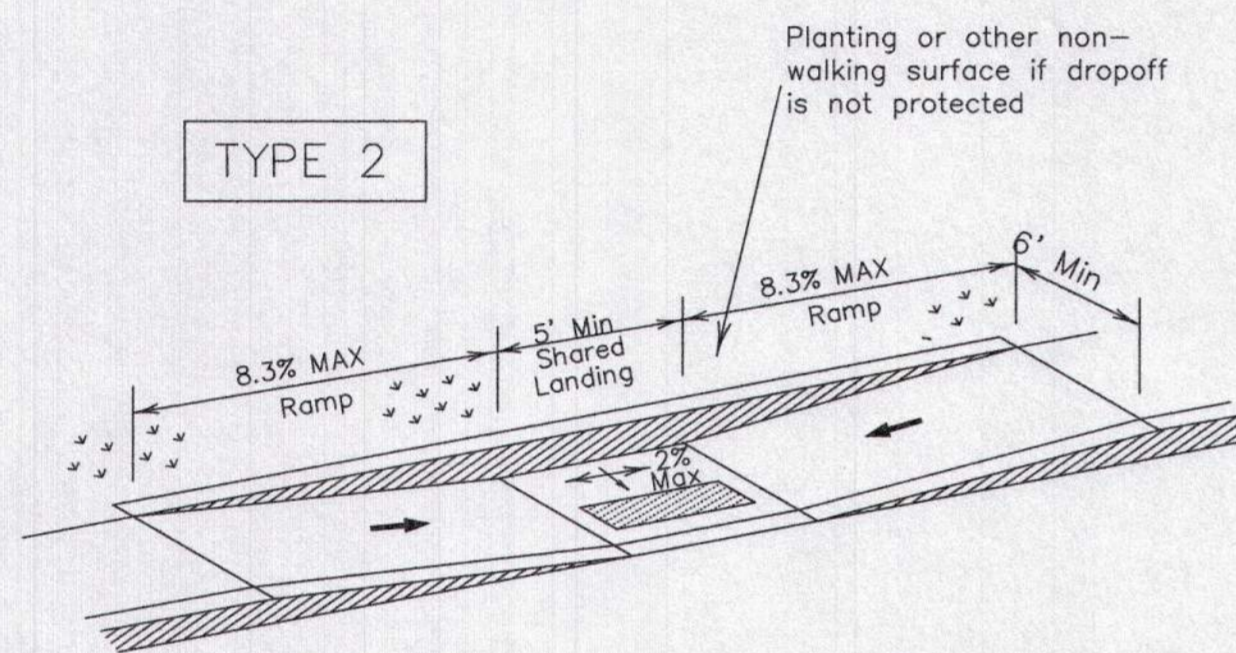
**TYPICAL GRANITE BLOCK CURBING**  
\*APPROX. 19" TO 23" (ASSUME EXIST. GRANITE CURB IS 19" HIGH)  
N.T.S.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
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	DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JERIGAN, DIRECTOR

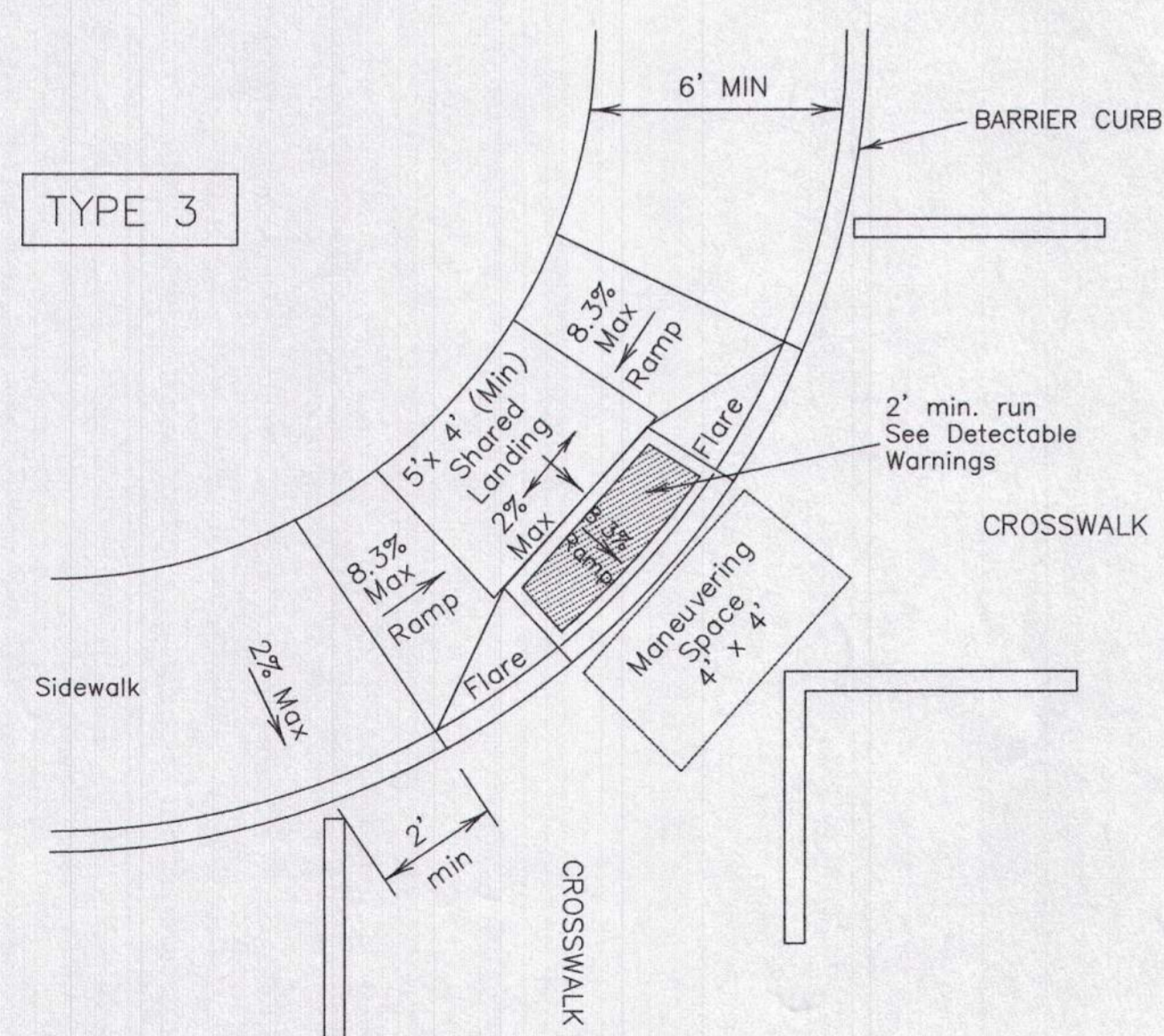




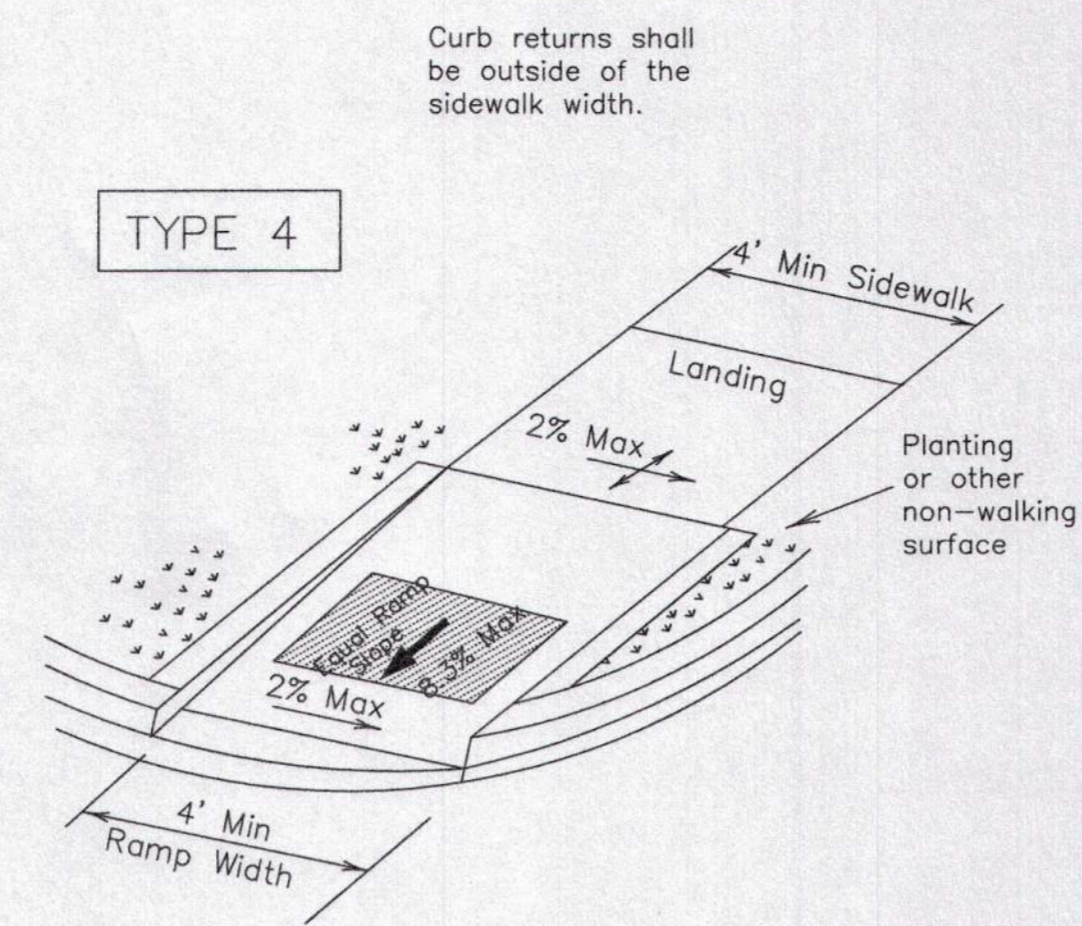
PERPENDICULAR CURB RAMP



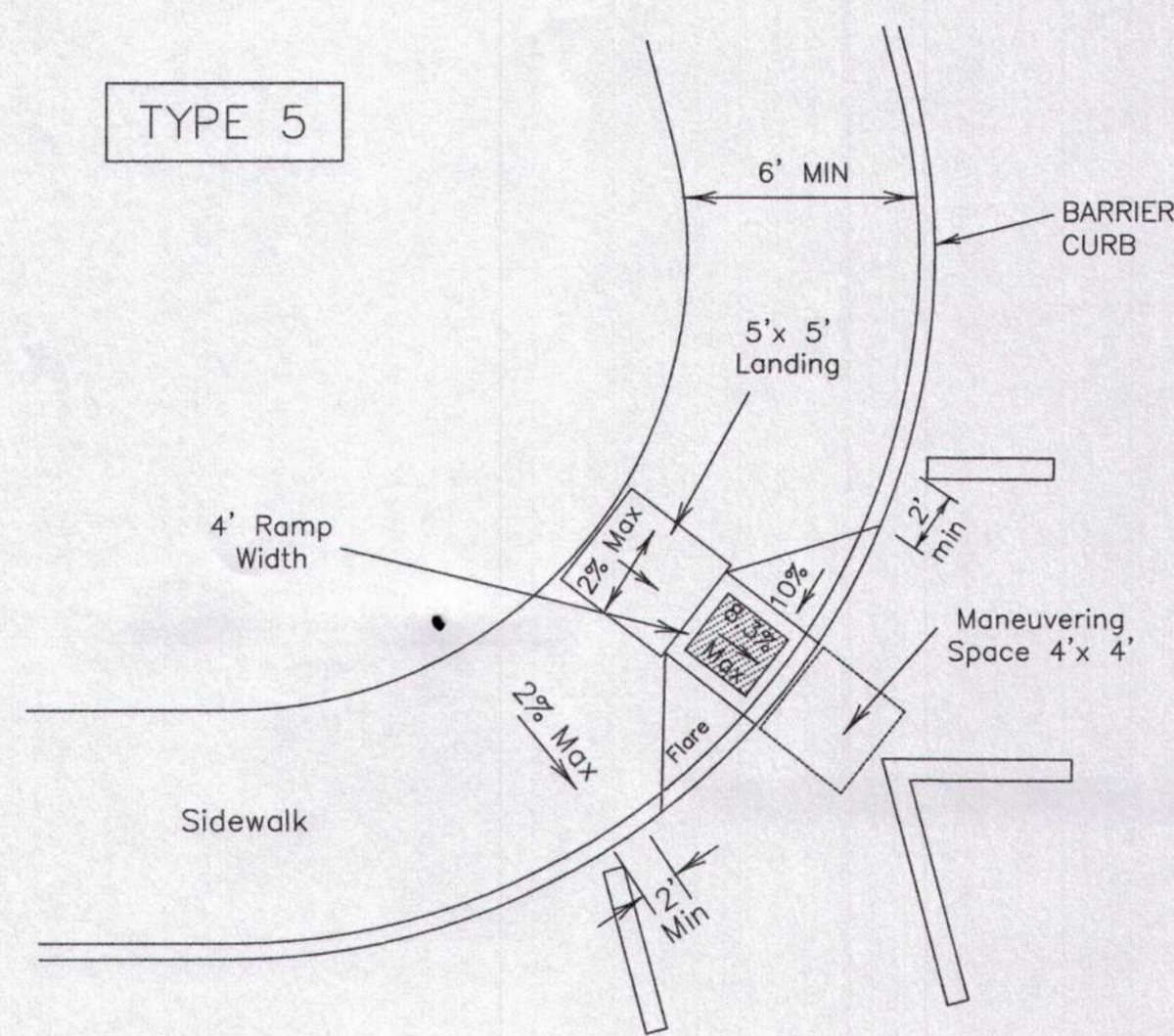
PARALLEL CURB RAMP  
(Use only where water will not pond in the landing)



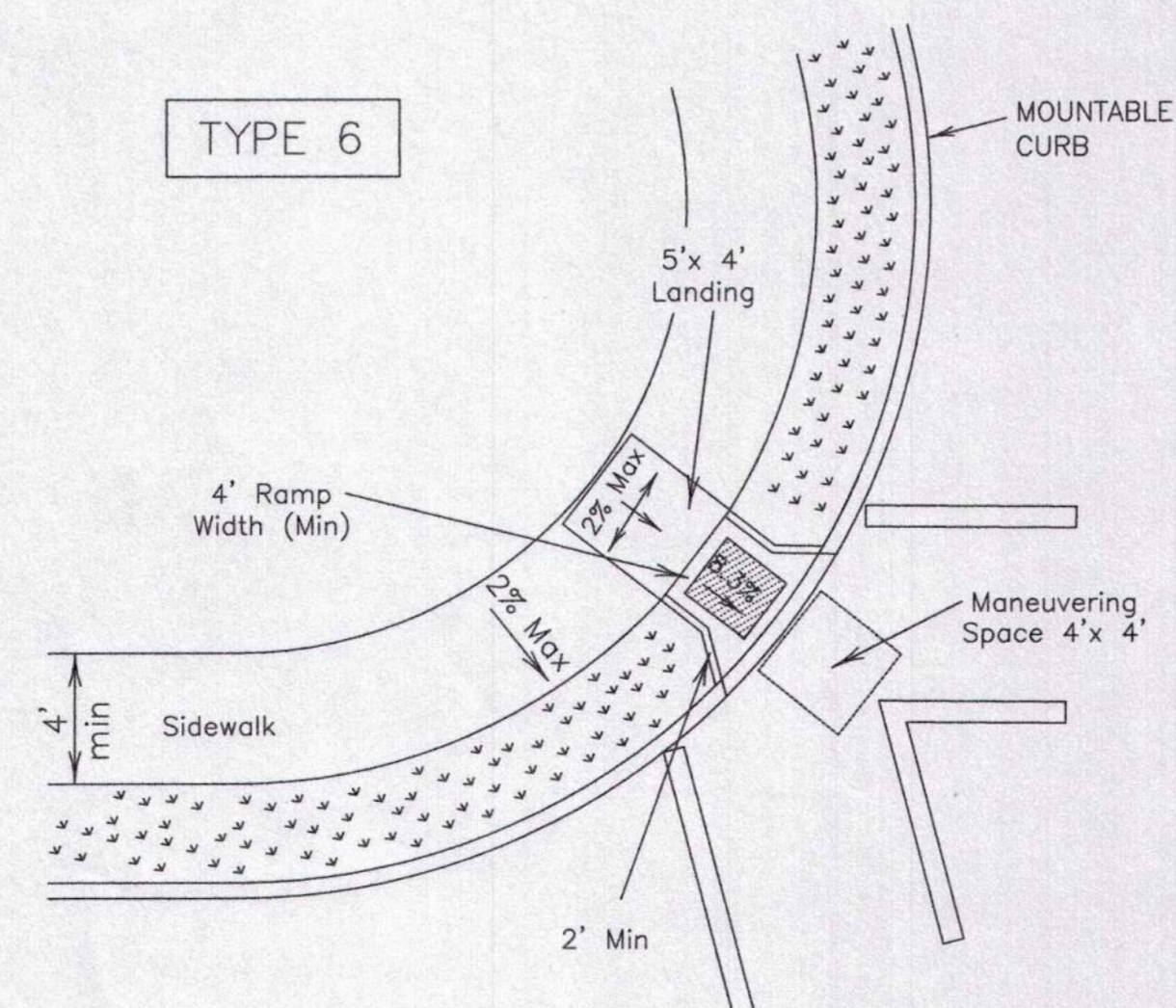
DIAGONAL COMBINATION CURB RAMP  
Perpendicular to the Tangent of the Curb  
Radius and Contained in Crosswalk



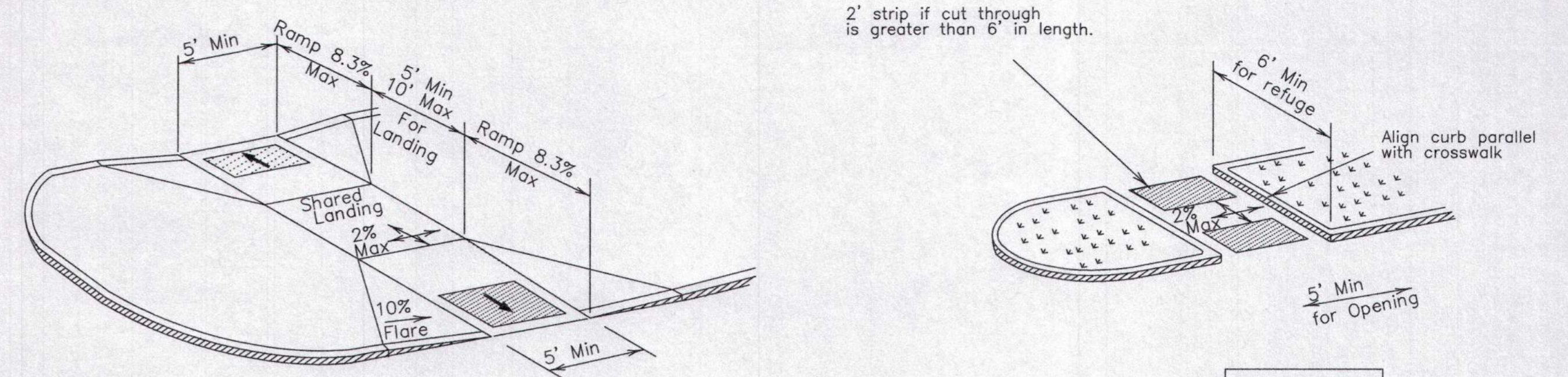
DIRECTIONAL RAMP WITHIN RADIUS  
(Sidewalk set back from curb)



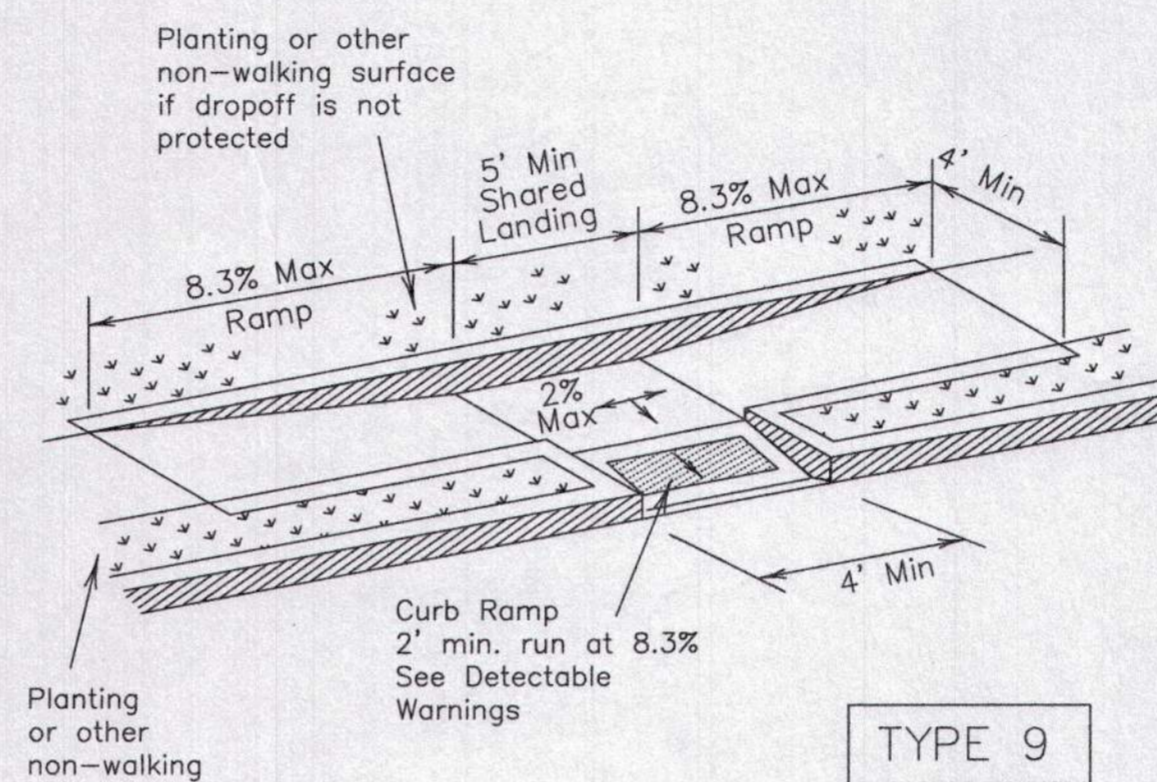
DIAGONAL CURB RAMP (FLARED SIDES)  
(PERMISSION FROM CHIEF ENGINEER REQ'D)



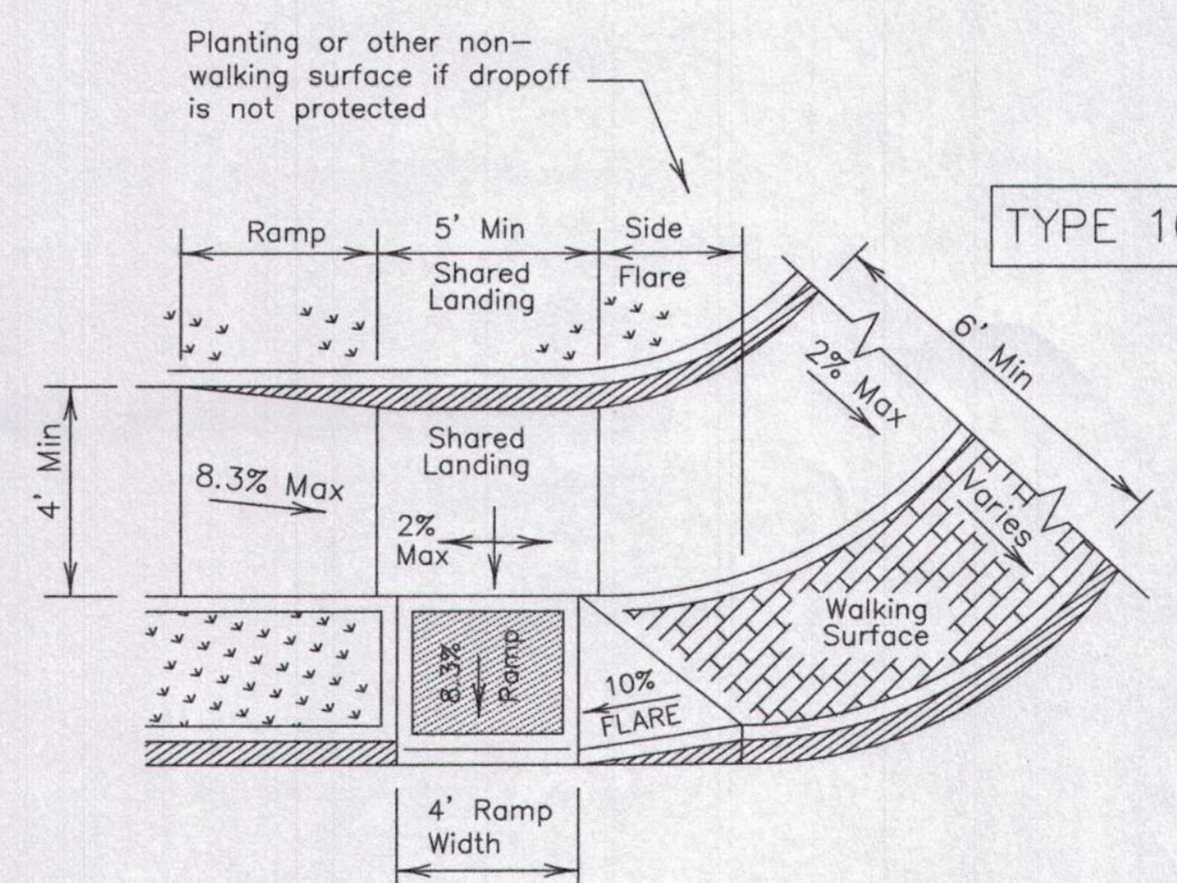
DIAGONAL CURB RAMP (RETURNED CURB)  
(PERMISSION FROM CHIEF ENGINEER REQ'D)



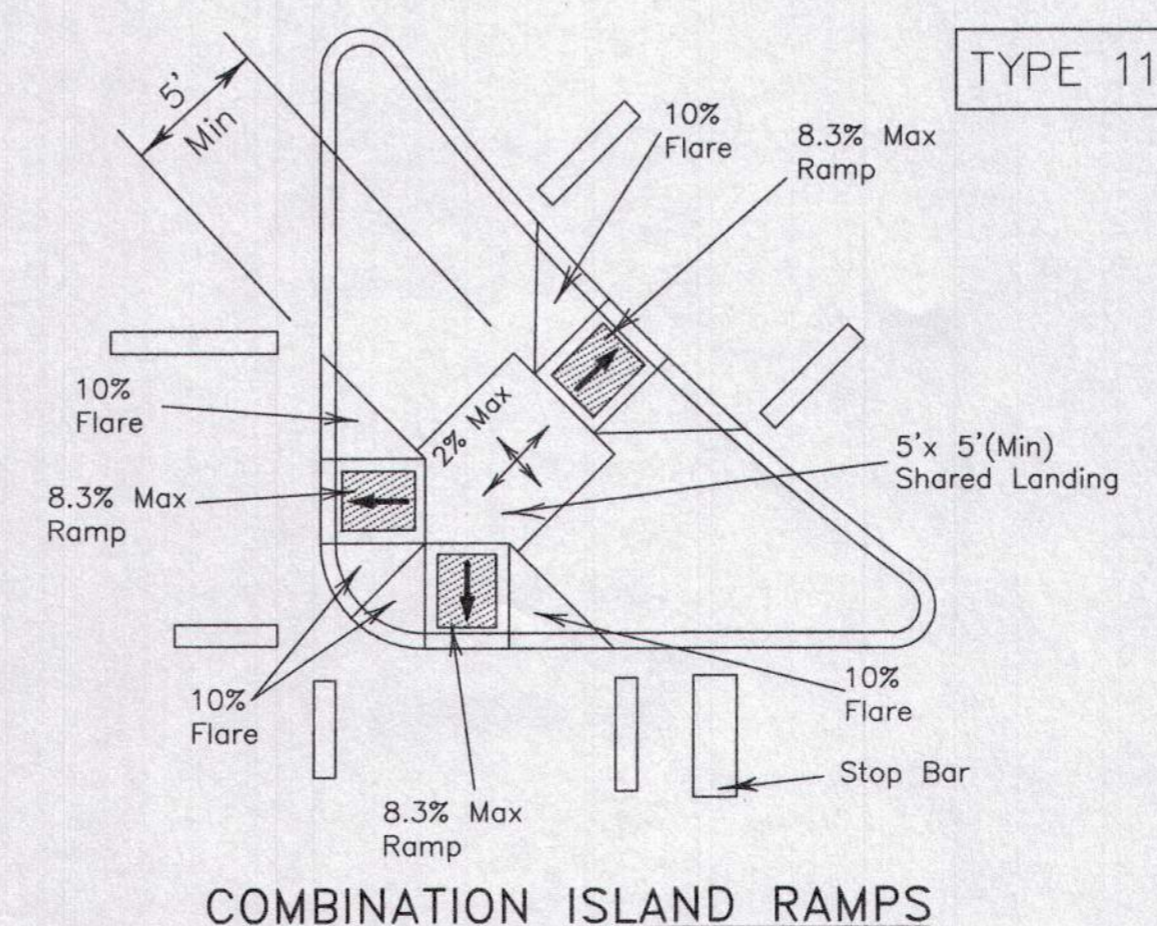
CURB RAMPS AT MEDIAN ISLANDS



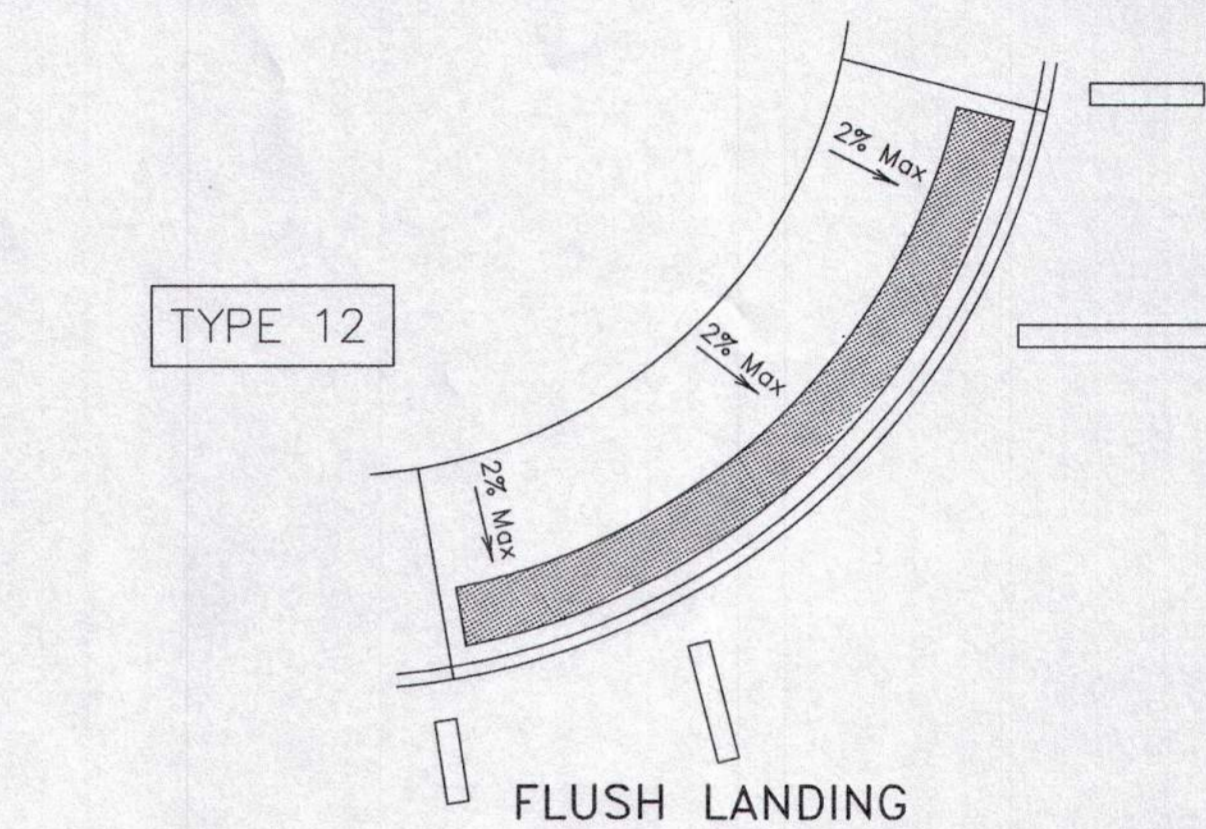
TYPE 9



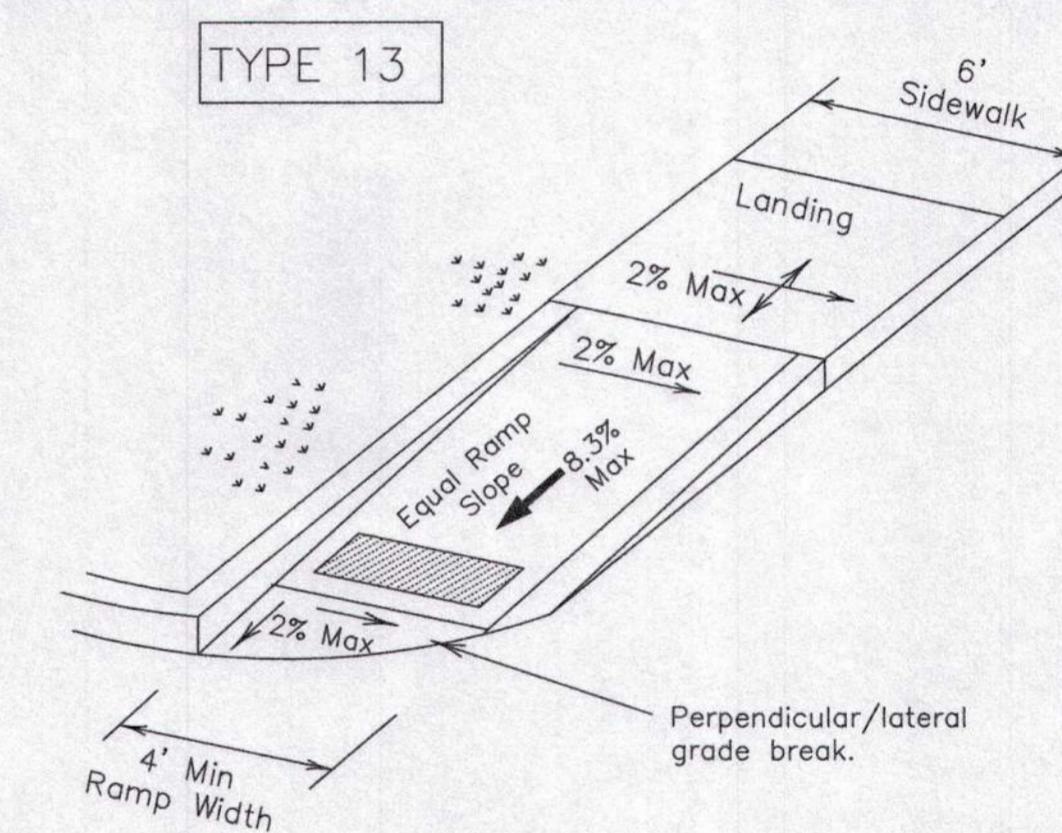
PERPENDICULAR SIDEWALK RAMP  
WITH SINGLE FLARE DETAIL



COMBINATION ISLAND RAMPS

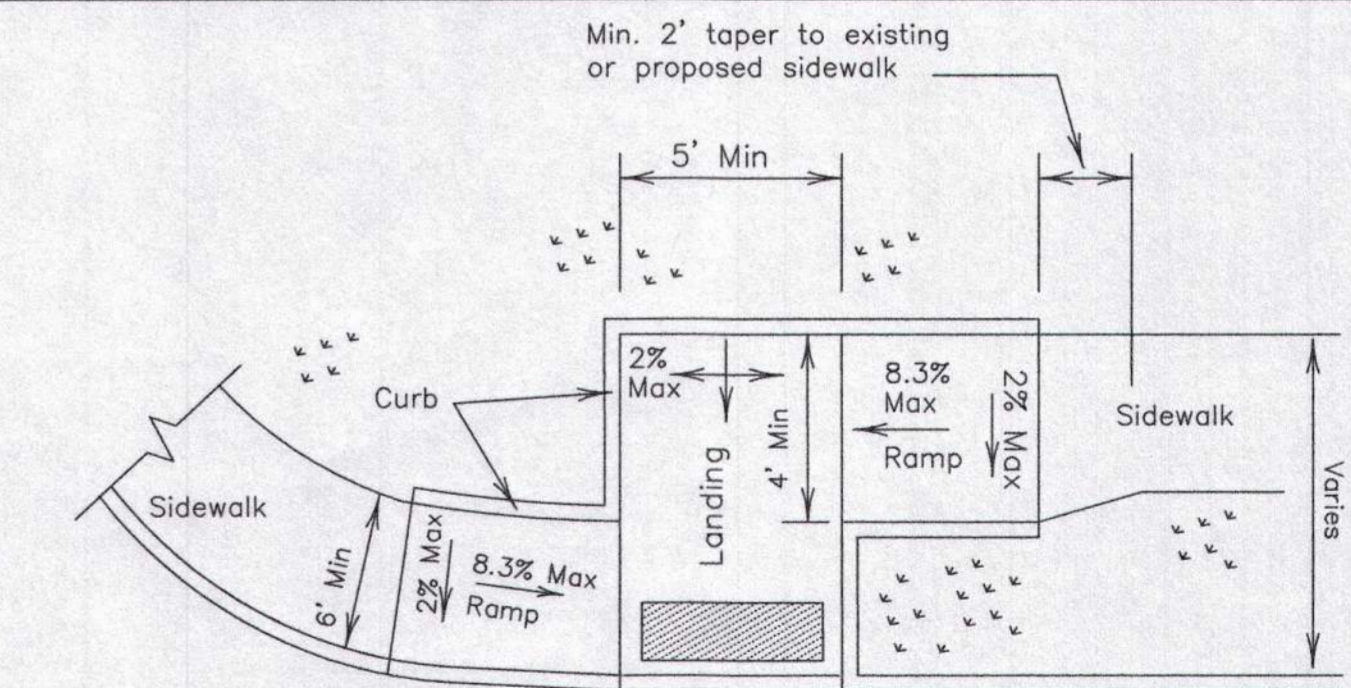


TYPE 12



TYPE 13

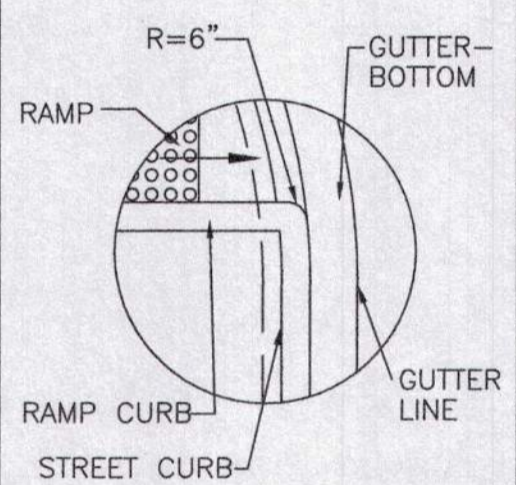
DIRECTIONAL RAMP WITHIN RADIUS  
(Sidewalk adjacent to curb)



TYPE 14

OFFSET PARALLEL CURB RAMP

- NOTES:
1. See General Notes on sheet ADA2 for more information.
  2. Cross slope not to exceed 2% on any portion of ramp or transition to street.



CURB RADIUS  
DETAIL  
N.T.S.

Denotes planting or non-walking surface.



CITY OF NEW ORLEANS  
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ENGINEERING DIVISION



CURB RAMPS  
FOR  
STREET CONSTRUCTION

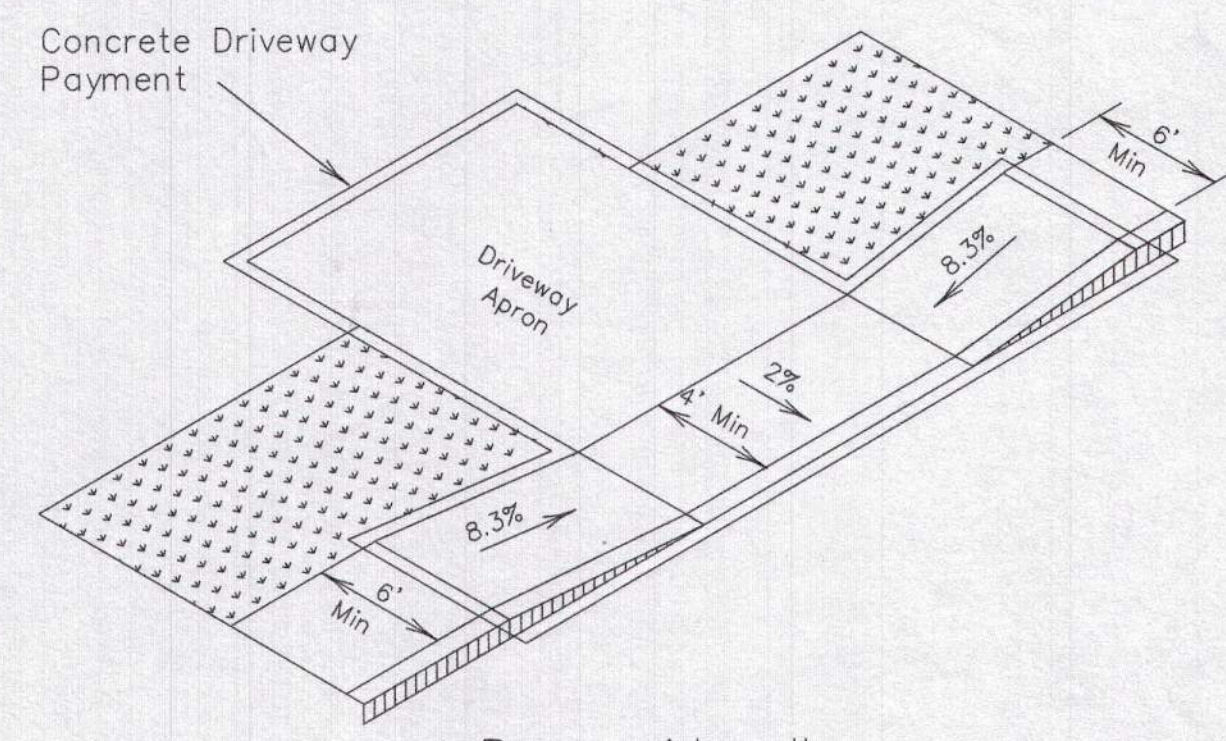
DRAWING No.

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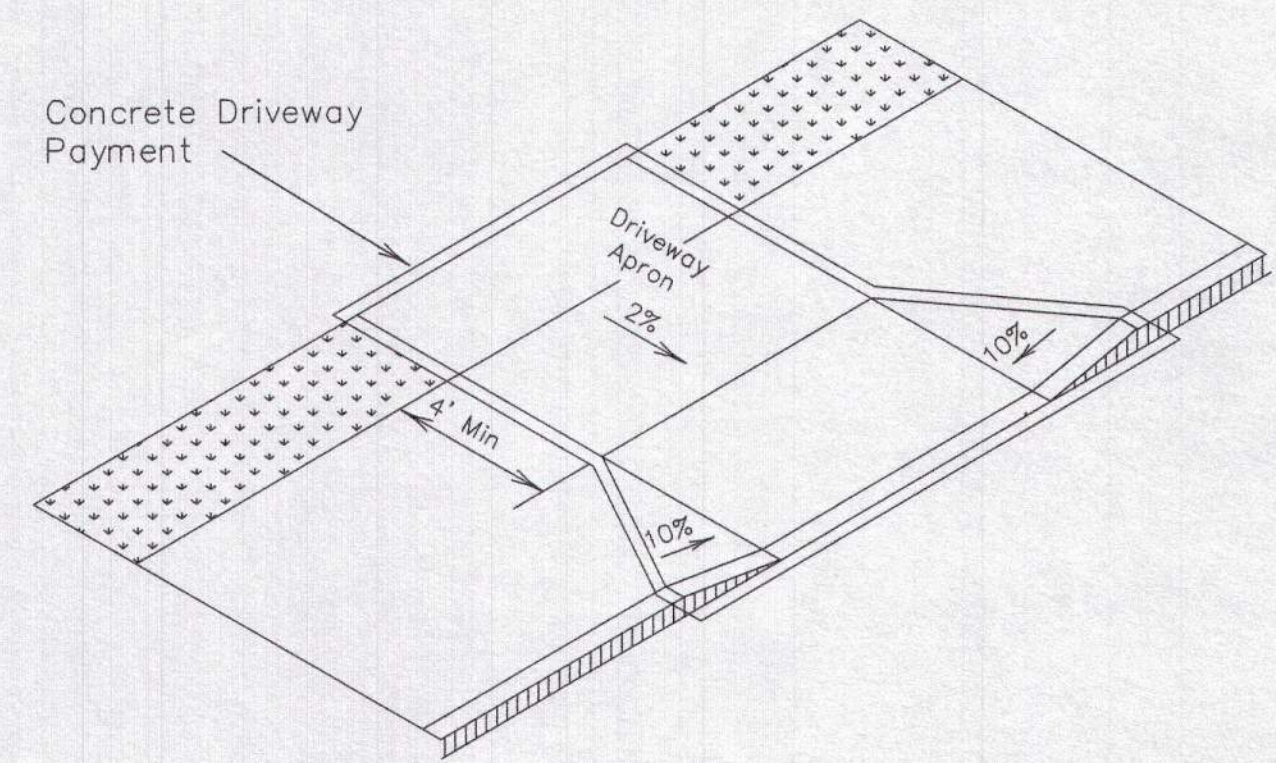
DRAWN BY: J. LARMEU  
REVIEWED BY: A.Y. L.H. N.S.  
RECOMMENDED BY: NGUYEN D. PHAN, CHIEF ENGINEER  
DATE: 2/3/2015  
SCALE: AS NOTED  
APPROVED: MARK D. JERKIN, DIRECTOR

ADA1

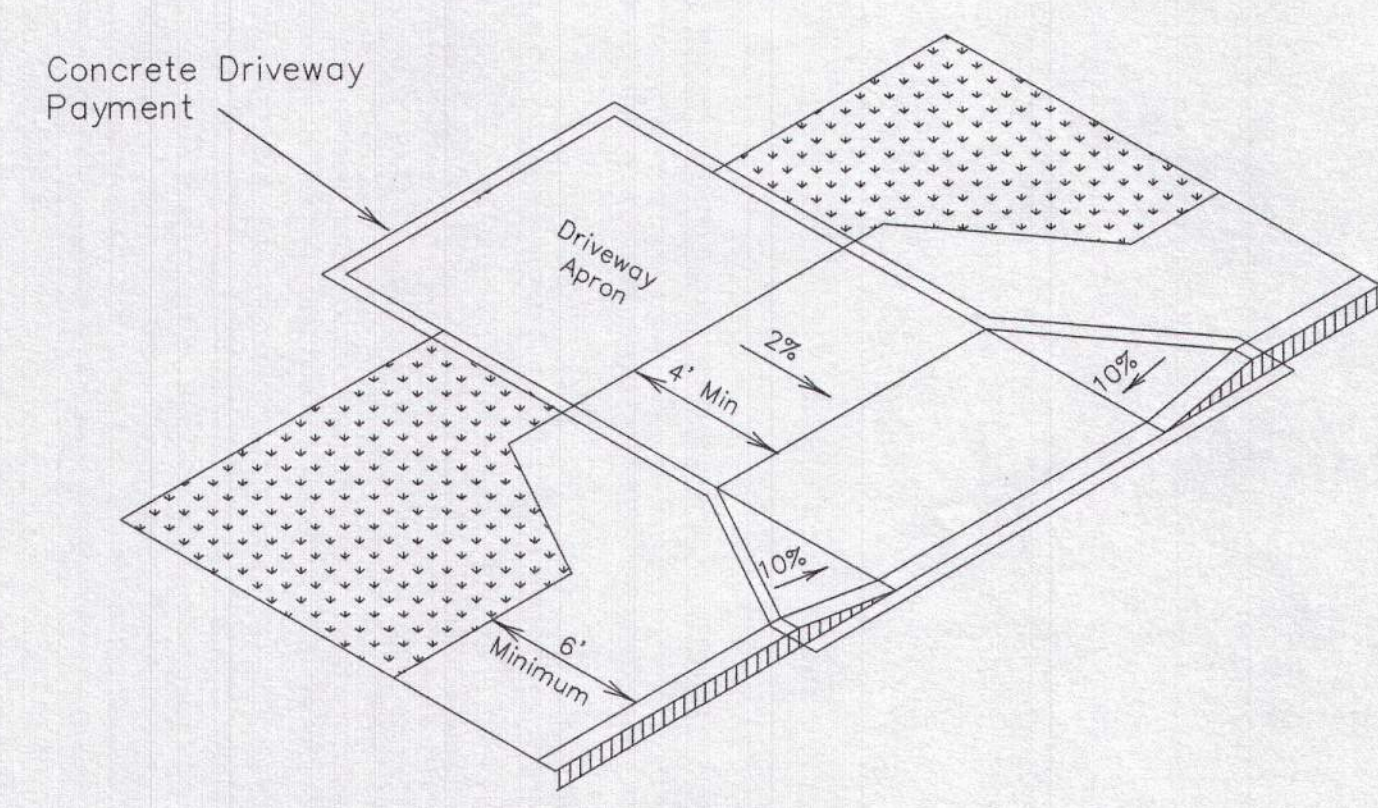




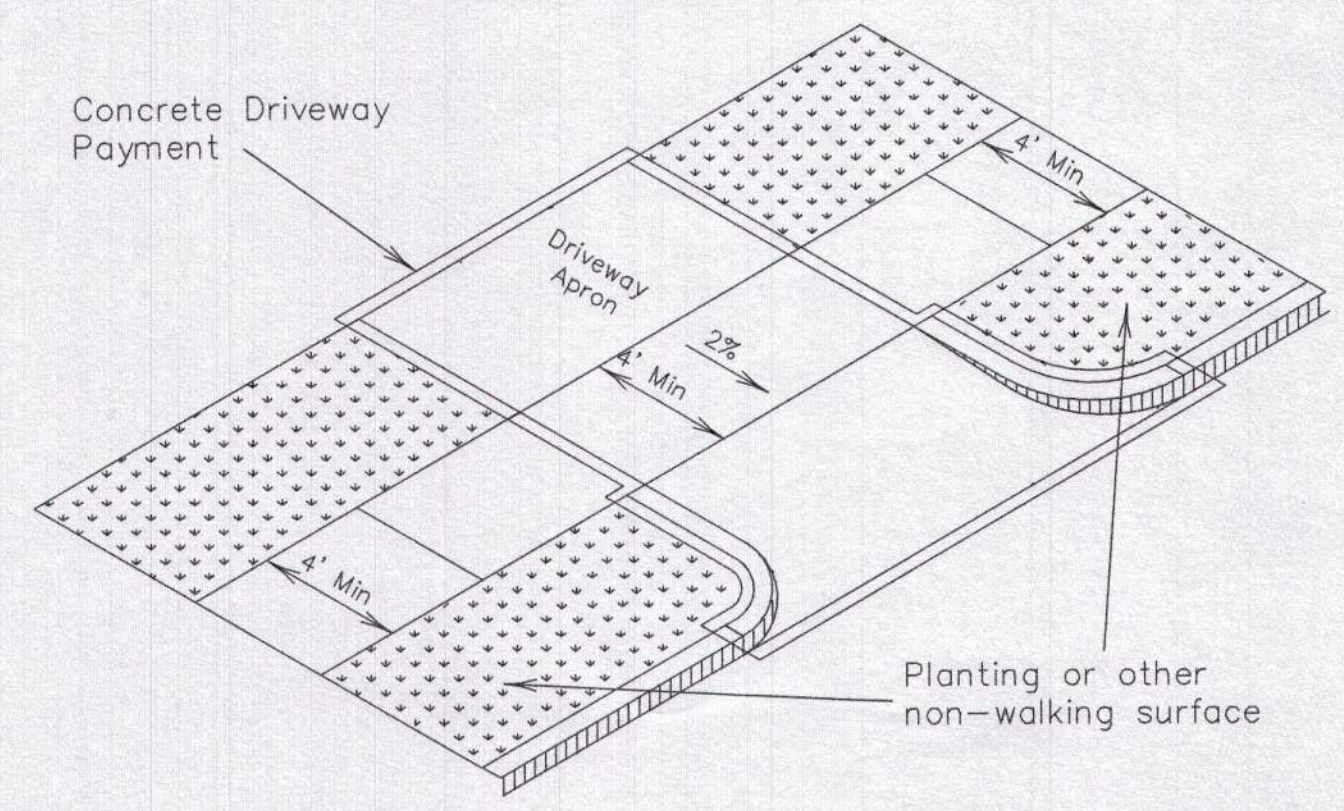
Ramp sidewalk



Wide sidewalk

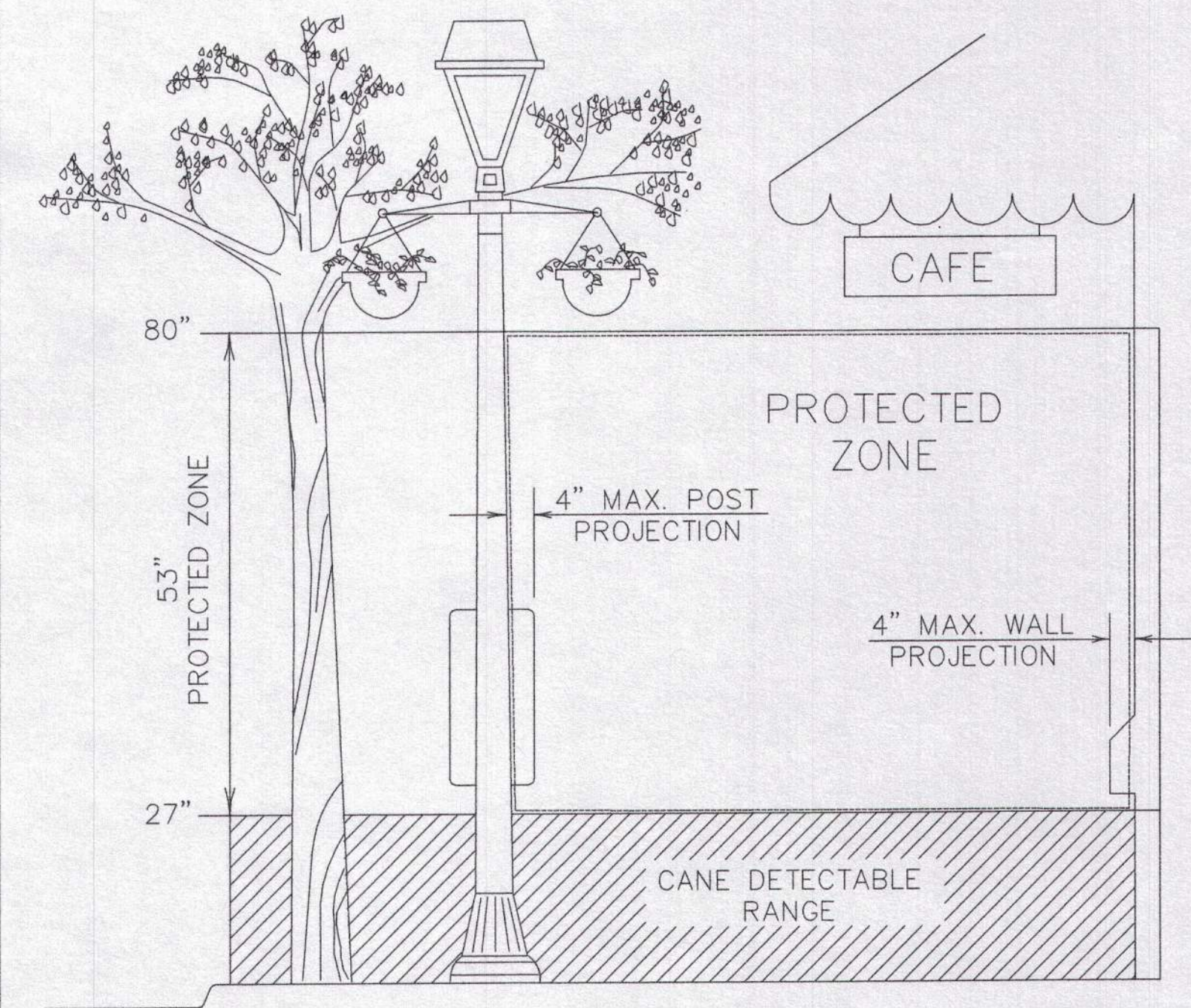


Apron offset sidewalk

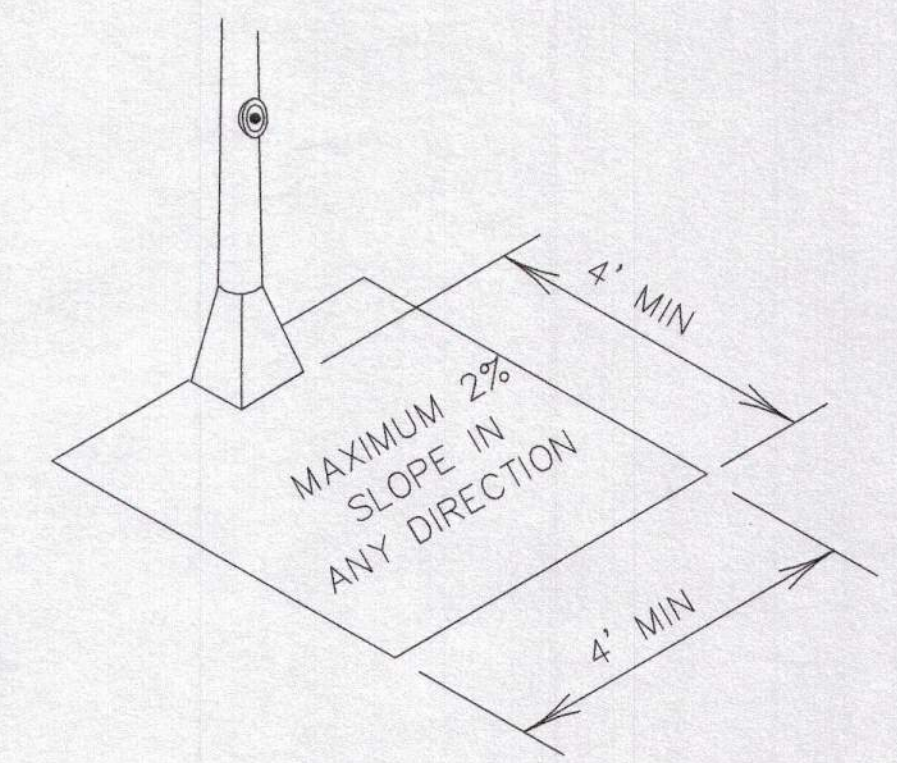


Setback sidewalk

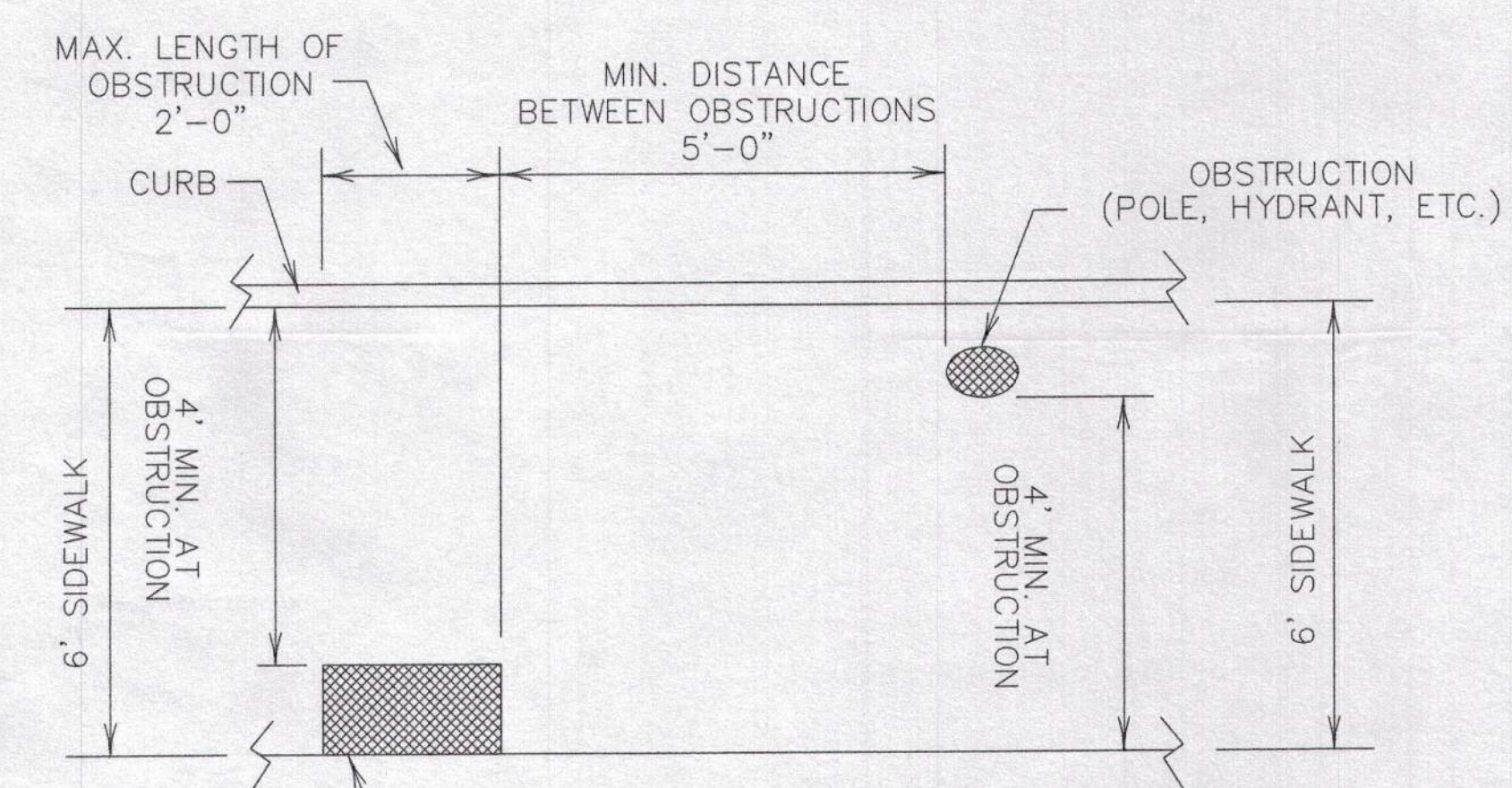
SIDEWALK TREATMENT AT DRIVEWAYS



In pedestrian circulation area, maximum 4" projection for post or wall mounted objects between 27" and 80" above the surface.

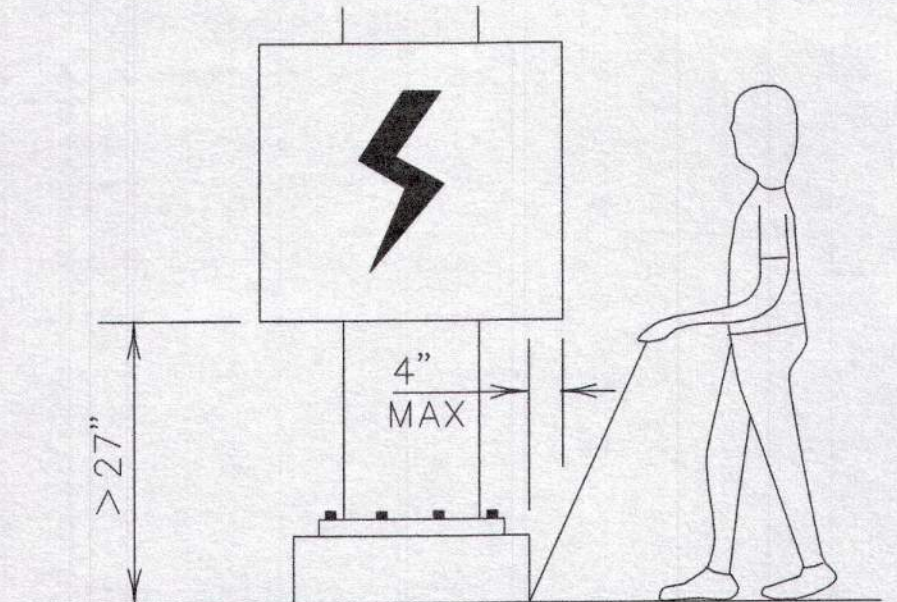


CLEAR GROUND SPACE AT PEDESTRIAN PUSH BUTTON



PLAN VIEW  
PLACEMENT OF STREET FIXTURES

(ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4' x 4' CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.)



When an obstruction of a height greater than 27" from the surface would create a protrusion of more than 4" into the pedestrian circulation area, construct additional curb or foundation at the bottom to provide a maximum 4" overhang.

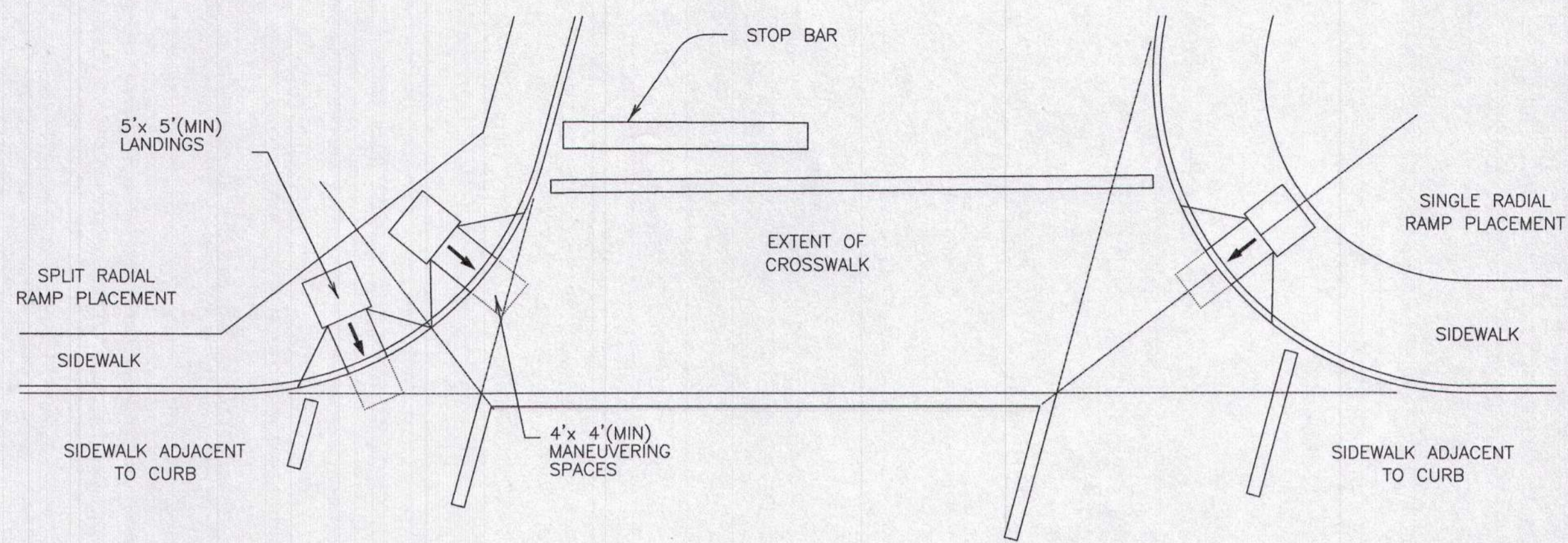
DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"

Pedestrian Facilities General Notes

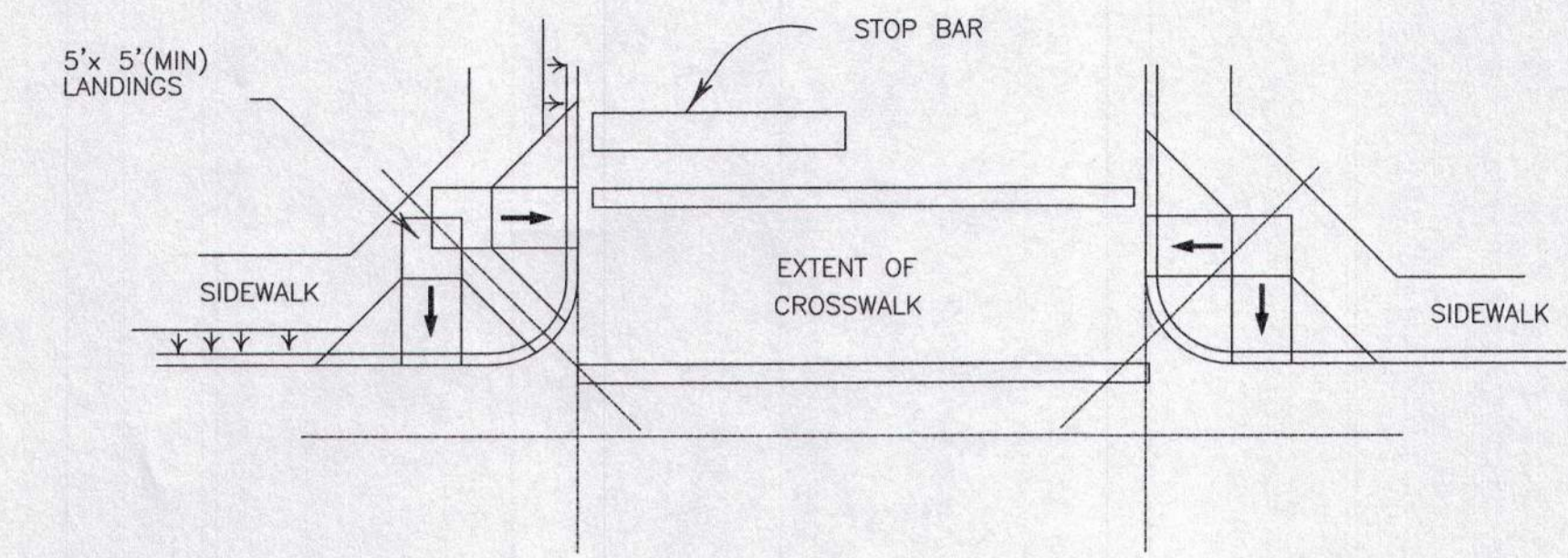
- All slopes shown are maximum allowable. The least possible slope that will still drain properly should be used.
- The minimum sidewalk width is 4', unless otherwise regulated. Where the sidewalk is adjacent to back of a barrier curb, the sidewalk width shall be 6'. Where a 4' sidewalk cannot be provided due to site constraints, a minimum 3' sidewalk with 5' x 5' passing areas at intervals not to exceed 200 ft is required.
- Changes in the level of sidewalk should be no more than 1/4". Changes in level greater than 1/4" but equal to or less than 1/2" may be beveled at a 1:2 maximum slope. Any change of level greater than 1/2" requires a ramp.
- The maximum desirable slope of a curb ramp shall be 8.33% (1:12). Ramp length or grade of approach sidewalks may be adjusted as directed by the Project Engineer. In alterations, curb ramp slope(s) may be 10% for a maximum rise of 6" or 12.5% for a maximum rise of 3". Curb ramps in alterations need not exceed 6' in length.
- Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
- Maximum allowable cross slope on sidewalk and ramp surfaces is 2%; desired cross slope is 1.5%.
- The desirable landing dimensions are 5' x 5' with a maximum 2% slope in any direction. If a level landing of at least 3' width cannot be provided, perpendicular curb ramps should not be used.
- Curb ramps with returned curbs may only be used where pedestrians would not normally walk across the ramp. Otherwise, flared sides shall be provided.
- All concrete surfaces shall receive a light broom finish unless noted otherwise in the plans.
- Separate curb ramps and landings from adjacent sidewalk and any other elements with pre-mold or board joint of 3/4" unless otherwise directed by the Project Engineer.
- Tooled joints are required at all sidewalk ramp or driveway slope break lines.
- Provide a smooth transition where the curb ramps connect to the street.
- Ramp textures must include truncated domed surfaces. Textures are required to be detectable underfoot. Surfaces that would allow water to accumulate are prohibited. Shaded areas indicate locations of detectable warnings. (Color: light reflective value and texture contrast)
- Note that where sidewalks intersect with streets, detectable warning systems are required at all street crossings.
- Ramps providing access to buildings shall follow the applicable requirements of the Public Right of Way Accessibility Guidelines (PROWAG).
- To serve as a pedestrian refuge area, raised medians should be a minimum of 6' wide, 10' desirable. Medians should be designed to provide accessible passage over or through them.
- Small channelization islands, which cannot provide a minimum 5' x 5' landing at the top of ramps, shall be cut through level with the surface of the street.
- On street parking will not be allowed within 20' of any crosswalks.
- Drainage structures in close proximity to curb ramps should be located on the upstream side of the ramp.
- Traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items shall be placed so as not to obstruct the accessible route.
- Street grades and cross-slopes shall be as shown elsewhere in the plans; however, parabolic crowns may require adjustment in crosswalk areas to limit crosswalk grade to 5%.
- Where existing driveway is in good condition and meets slope requirements, construct only as much as required for satisfactory connection with new work.
- Where gravel driveways occur, at least 10' of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
- Cross walk dimensions and crosswalk markings shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, ramps shall be aligned with theoretical crosswalks or as directed by the Project Engineer.
- Where crosswalks occur, a 24" solid white line shall be placed across all approach lanes to indicate the point behind which vehicles are to stop. Stop bars shall be placed at a minimum 4' in advance of a crosswalk.
- Driveways, sidewalks, and ramps shall be constructed and paid for in accordance with the applicable sections of the Standard Specifications. The limits of payment for handicap ramps shall include but not be limited to curb transition, detectable warning system, gutter, landing and base.
- Though the least possible grade should be used to maximize accessibility, where it is structurally impractical to achieve ADA compliance, the running slope of sidewalks and crosswalks within the public right-of-way, may follow the grade of the parallel roadway without invoking variances or landings or handrails. Where a continuous grade greater than 5% must be provided, handrails may be desirable on one or both sides of the sidewalk to improve accessibility.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	CURB RAMPS FOR STREET CONSTRUCTION		
DRAWN BY: J. LARMEU		REVIEWED BY: A.Y. L.H. N.S.	RECOMMENDED BY: N. Phan NGUYEN D. PHAN, CHIEF ENGINEER
DATE: 2/3/2015		SCALE: AS NOTED	APPROVED: MARK D. JERRICAN, DIRECTOR
THE SELECTION AND USE OF THESE DETAILS, WHILE DESIGNED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES, IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A LOUISIANA REGISTERED PROFESSIONAL ENGINEER.			DRAWING No.  <b>ADA2</b>

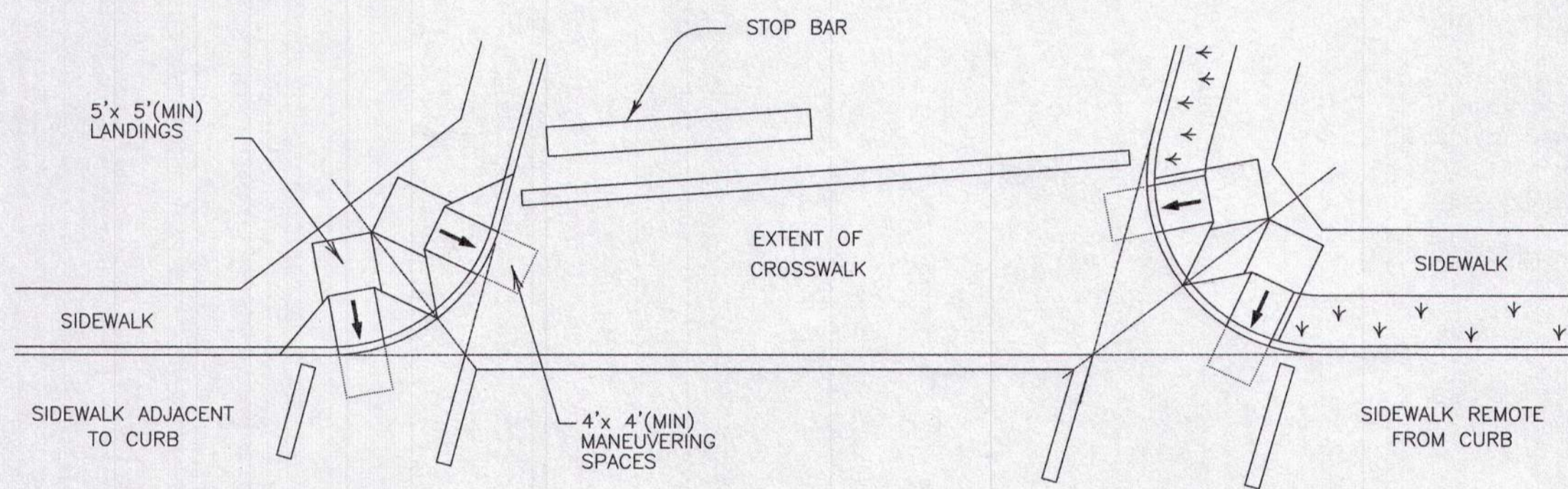




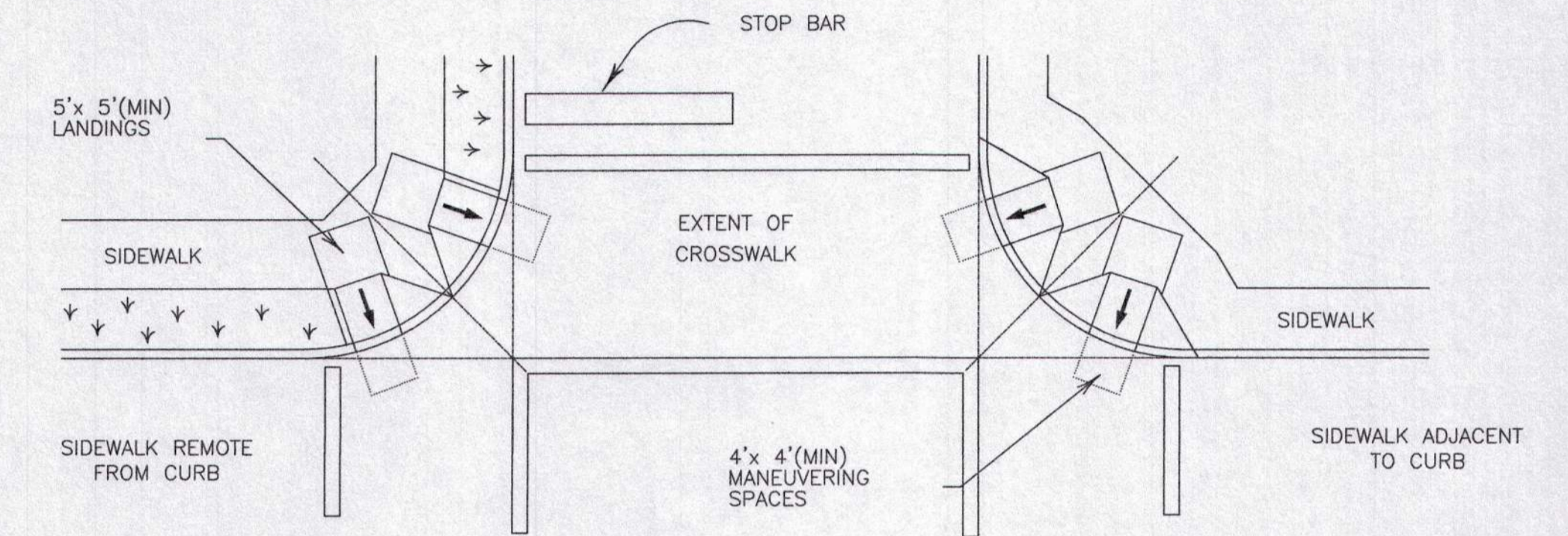
SKewed INTERSECTION WITH "LARGE" RADIUS



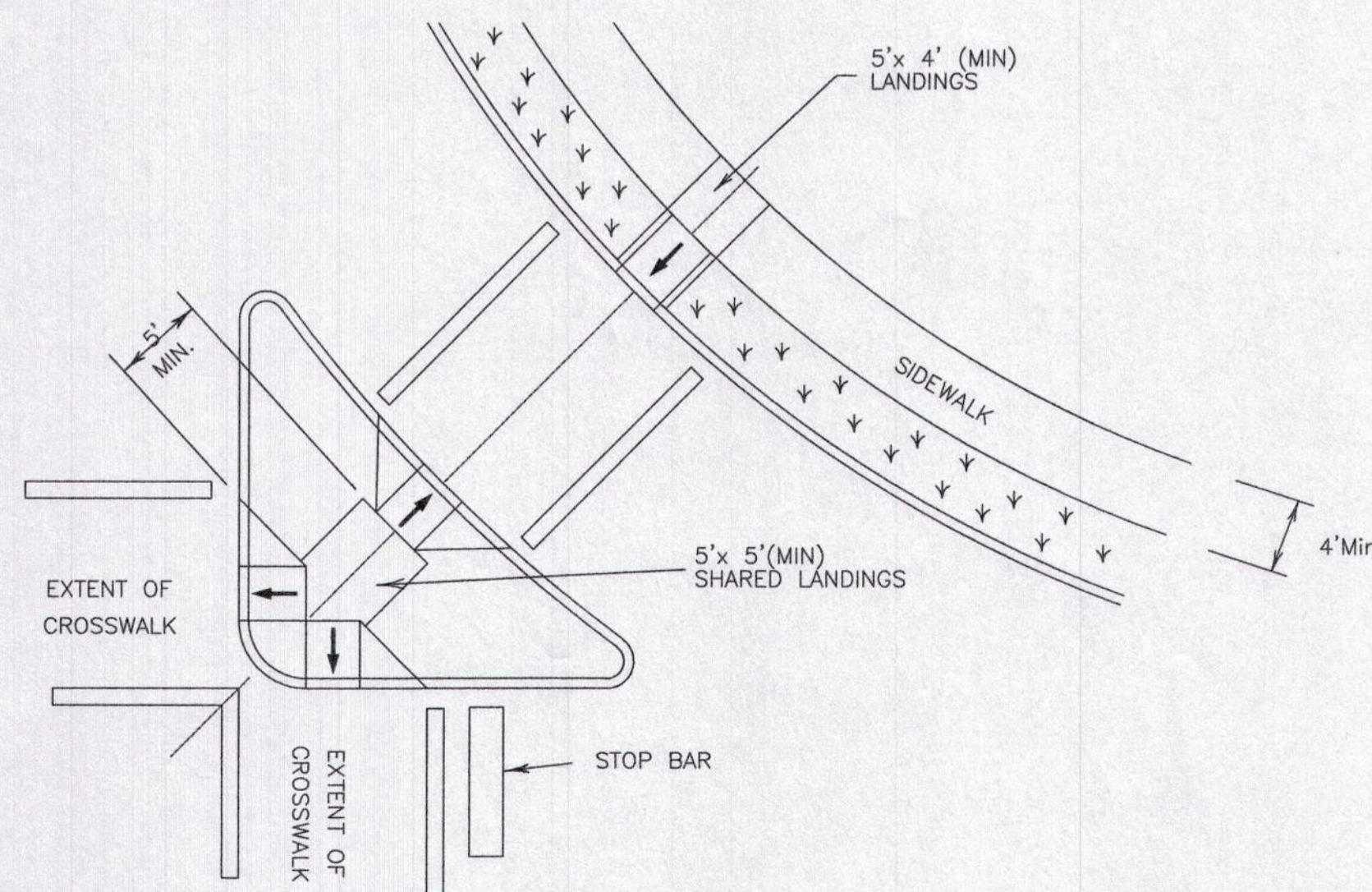
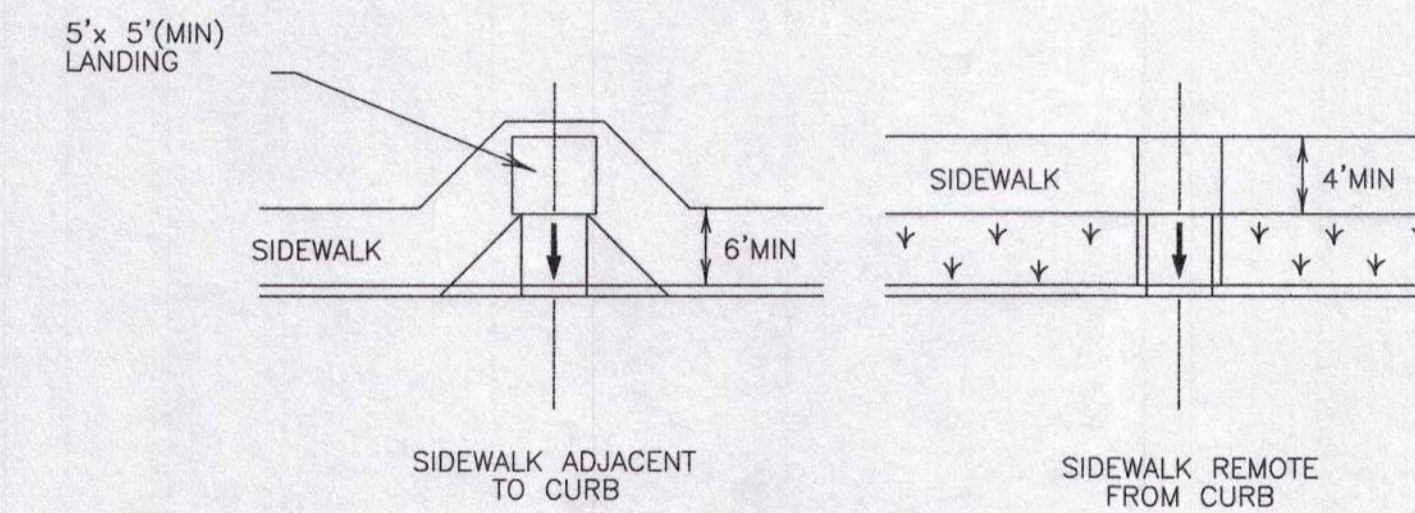
NORMAL INTERSECTION



SKewed INTERSECTION WITH "SMALL" RADIUS



MID-BLOCK PLACEMENT PERPENDICULAR RAMPs





AT INTERSECTION W/FREE RIGHT TURN & ISLAND

General Note:

Ramps are shown here without detectable warnings for simplicity. Detectable warnings are required at the locations shown on Sheet ADA1 and in accordance with the details shown elsewhere herein below.

Striping (Crosswalks and stop bars) is shown for reference only.

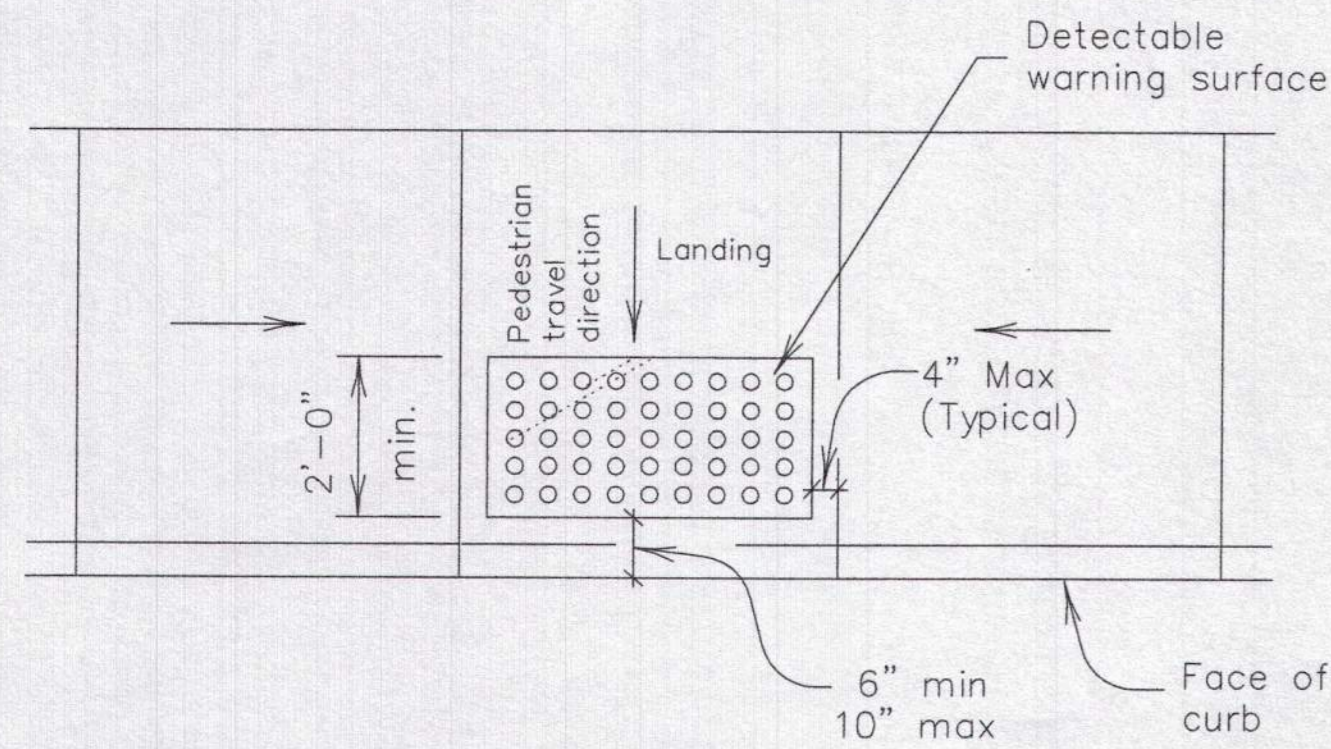
See PM1 for Striping Layout.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	INTERSECTION LAYOUT FOR STREET CONSTRUCTION		
THE SELECTION AND USE OF THESE DETAILS, WHILE DESIGNED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES, IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A LOUISIANA REGISTERED PROFESSIONAL ENGINEER.	DRAWN BY: J. LARMEU	REVIEWED BY: A.Y. L.H. N.S.	RECOMMENDED BY: NGUYEN D. PHAN, CHIEF ENGINEER
	DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JEROME, DIRECTOR
			DRAWING No. <b>ADA3</b>

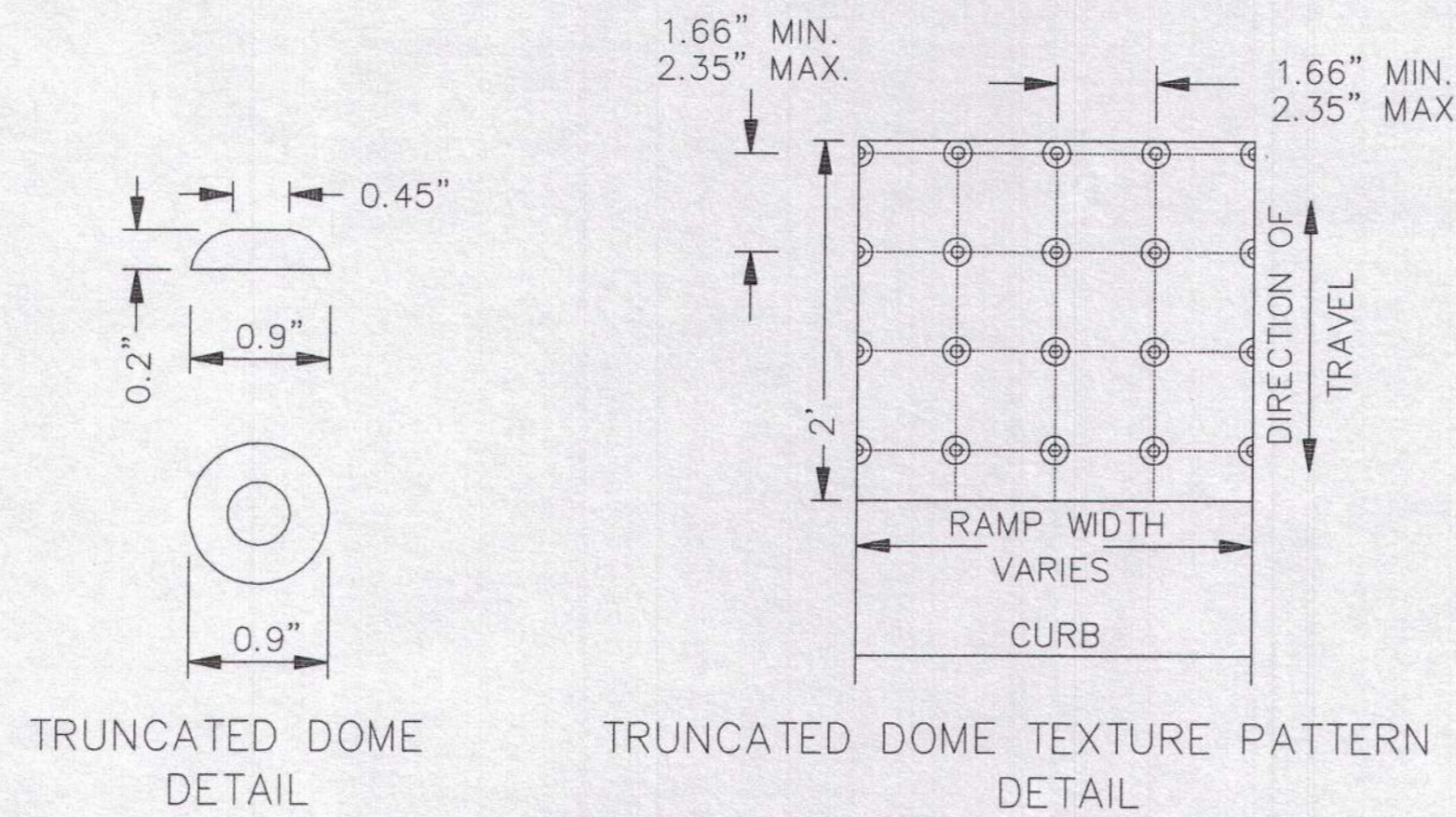


Detectable Warnings General Notes

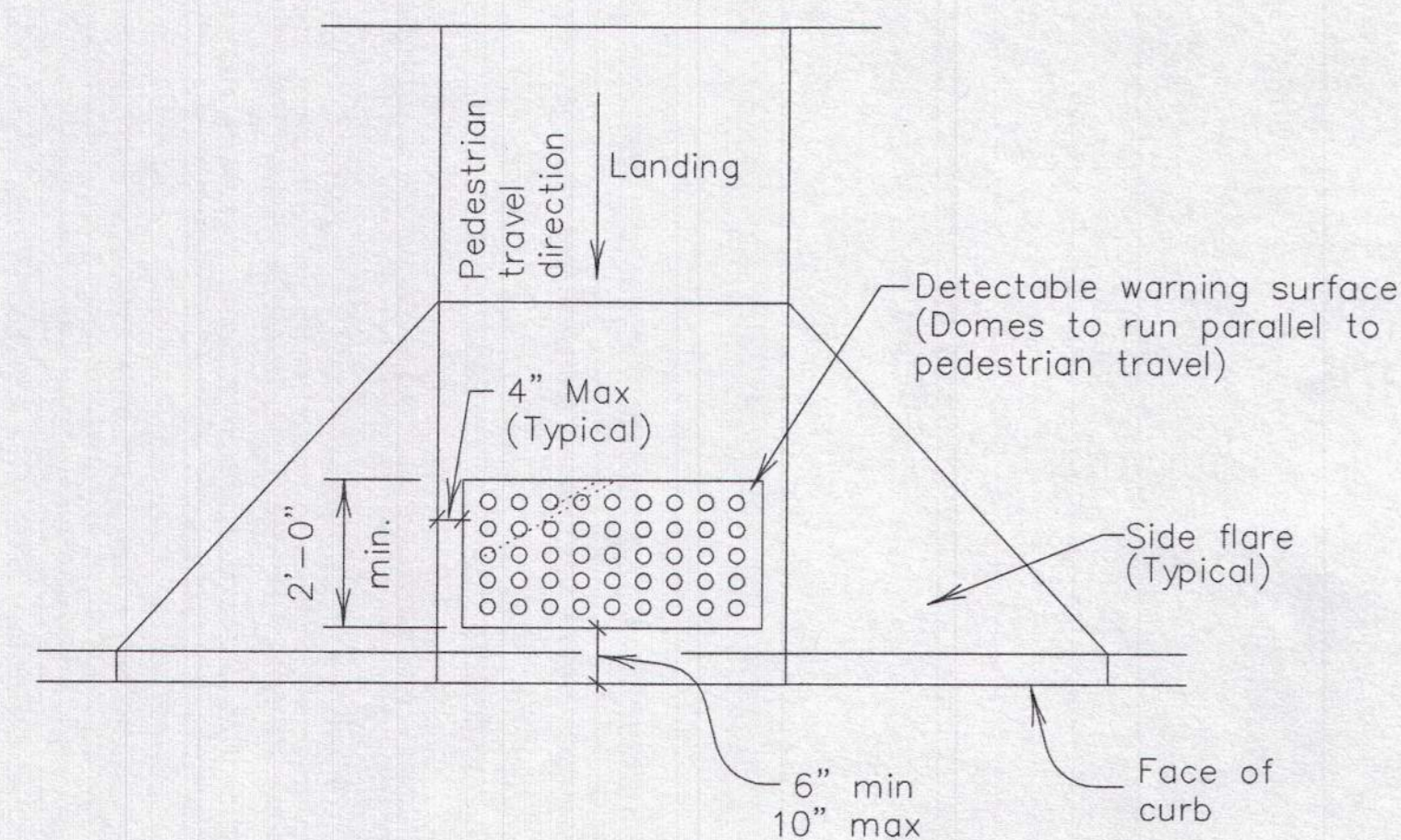
- For PROWAG compliance, detectable warning surfaces must be provided on all pedestrian curb ramps, medians and pedestrian refuge islands, railroad crossings and at grade sidewalk intersections with roadways.
- Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with ADA guidelines. The surface must contrast visually with adjoining surfaces, including side flares, in accordance with applicable sections of the Standard Specifications. Color for detectable warning surface shall be gray unless otherwise specified in the plans or by the project engineer.
- Detectable warning surfaces must be slip resistant and not allow water to accumulate.
- Align truncated domes in the direction of pedestrian travel when entering the street.
- Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel and extend the full width of the throat of the curb ramp or landing where the pedestrian access route enters the street.
- Detectable warning surfaces shall be located so that the edge nearest the curb line is a minimum of 6" and maximum of 10" from the extension of the face of curb. Detectable warning surfaces may be curved along the corner radius. On flush median openings or depressed corners, truncated domes to be located along face of curb.
- Detectable warning surfaces (truncated domes) may be stamped, constructed of brick pavers or inlaid prefabricated mats attached by epoxy adhesive and mechanical attachment.
- For stamped applications, the detectable warning surface will be stamped and stained in accordance with manufacturer's recommendations. However, the following criteria shall be used for the concrete mix design in the overall construction of handicap ramps:
  - Average compressive strength: 4000 psi
  - Aggregate gradation: Type B pavement gradation
  - Minimum cement content: 600 pounds per cubic yard
  - Maximum water/cement ratio: 0.40
  - Total air content: 5% (+/- 2%)
  - Maximum slump: 6 inches
  - Curing: The exposed plain concrete (non-color stained concrete) surface should have a white pigment curing compound applied in such a manner that the surface and any exposed sides are evenly and uniformly covered to resemble a white sheet of paper. In no case should the application of curing compound be less than 1 gallon per 100 square feet.
- Any retrofit application must have beveled edges on the sides with approach pedestrian traffic.
- Where the ends of the bottom grade break are behind the back of curb and distance from either end of the bottom grade break to the back of curb is more than 5'-0", detectable warning surfaces shall be placed on the lower landing at the back of curb.



Typical placement of detectable warning surface on landing at street edge.

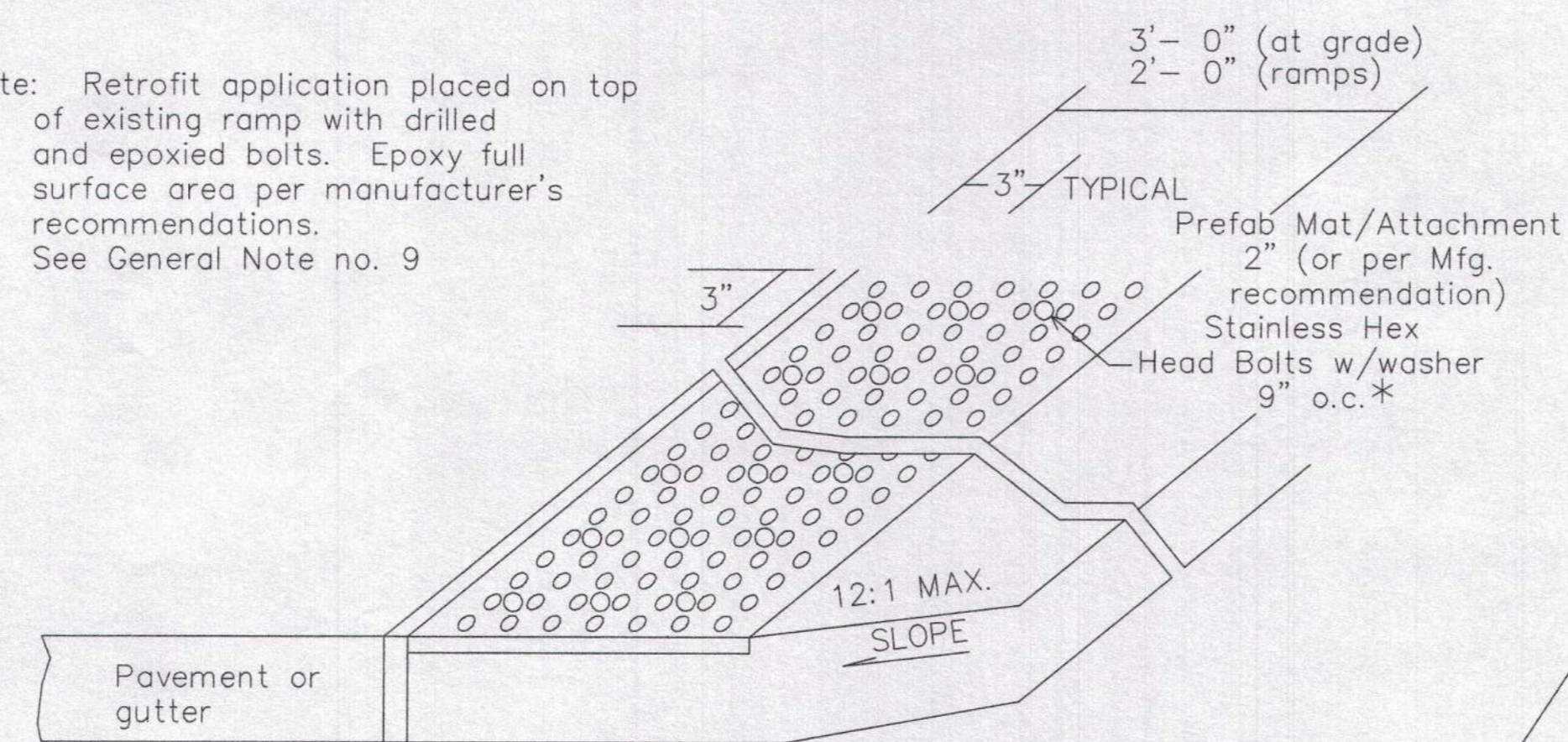


Note: Place truncated domes detectable warning texture in the lower 2' of throat of ramp only and a 3' wide pattern at "at-grade" sidewalk intersections with roadways. Domes shall be arranged in a square in-line pattern only as shown.

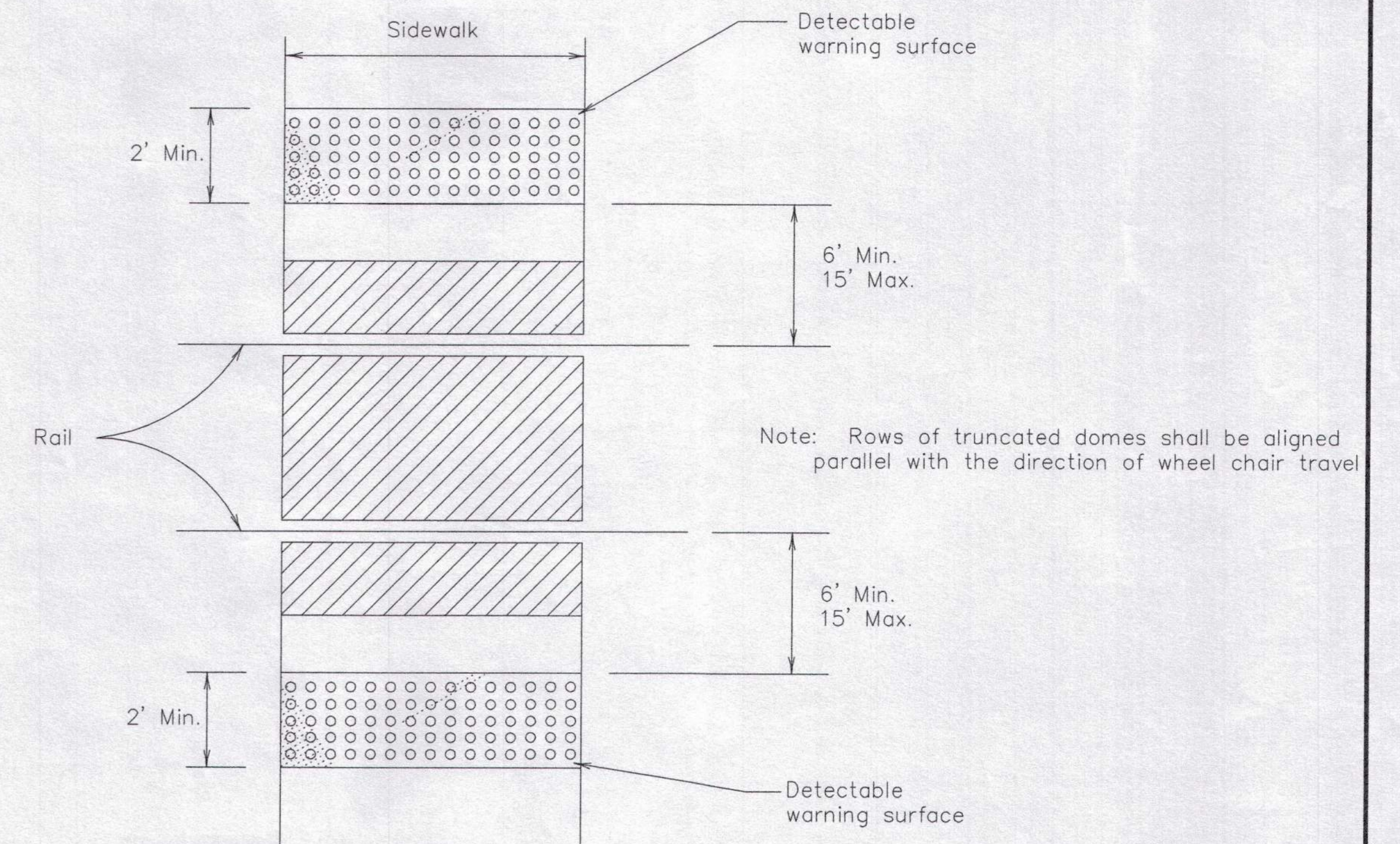


Typical placement of detectable warning surface on sloping ramp run.

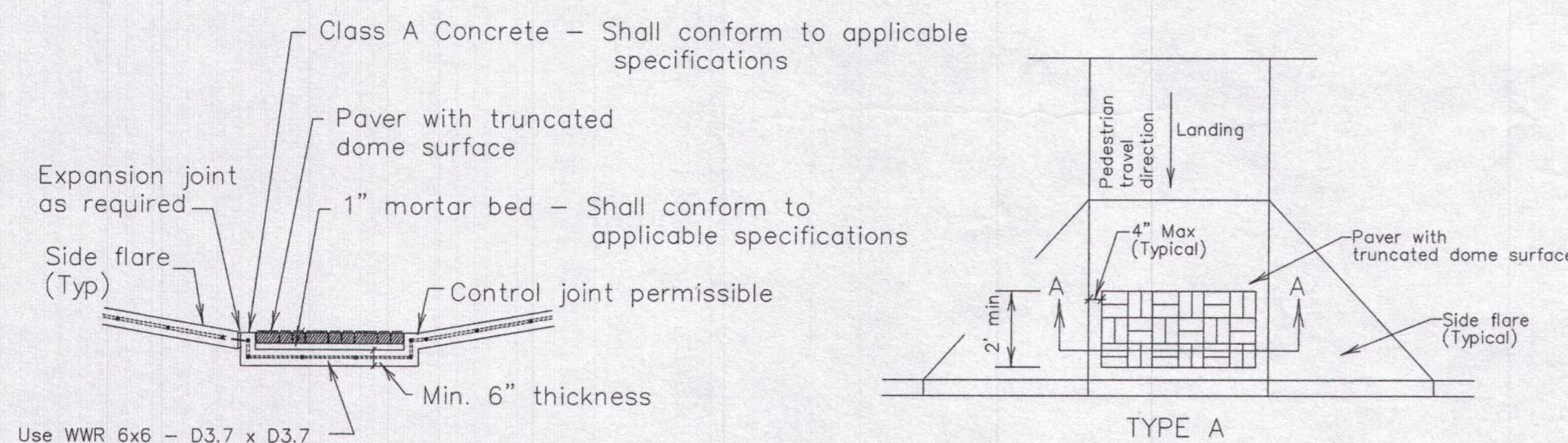
\* Note: Retrofit application placed on top of existing ramp with drilled and epoxied bolts. Epoxy full surface area per manufacturer's recommendations. See General Note no. 9



PREFABRICATED MAT OPTION (INLAID)

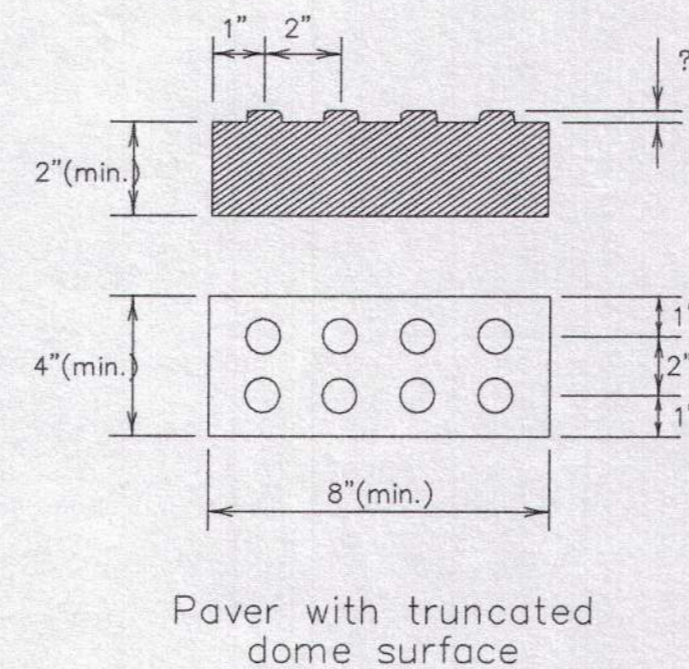


LOCATION OF DETECTABLE SURFACE AT RAILROAD CROSSINGS



Section A-A

Truncated Dome Pattern Curb Ramp  
DETECTABLE WARNINGS (Paver Option)



Paver with truncated dome surface

General Notes for Paver Option

Paver units shall meet all requirements of the applicable ASTM standards. Layout pattern shall be appropriate for size paver used. 4" x 8" pavers shall be laid out in a 2 x 2 basket weave pattern. 12" x 12" pavers shall be laid out in a block pattern.

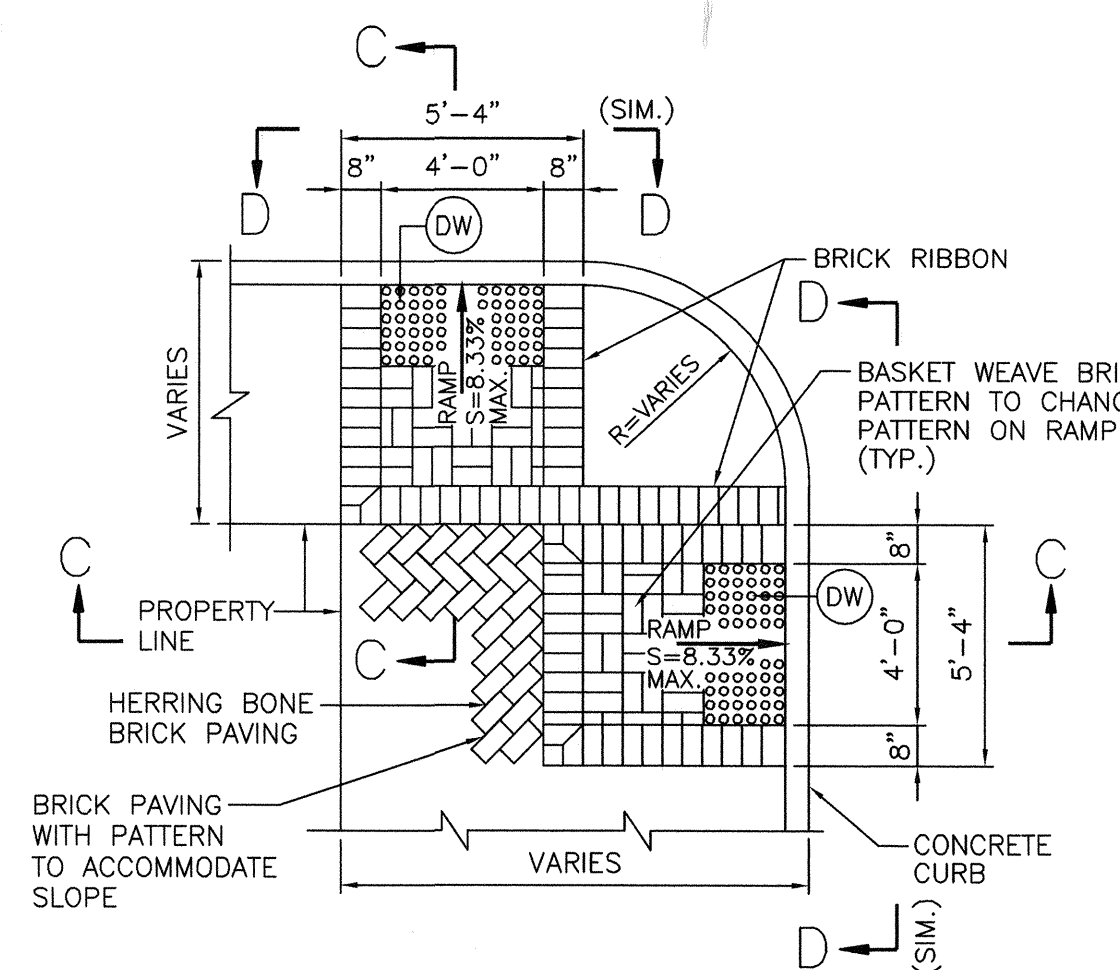
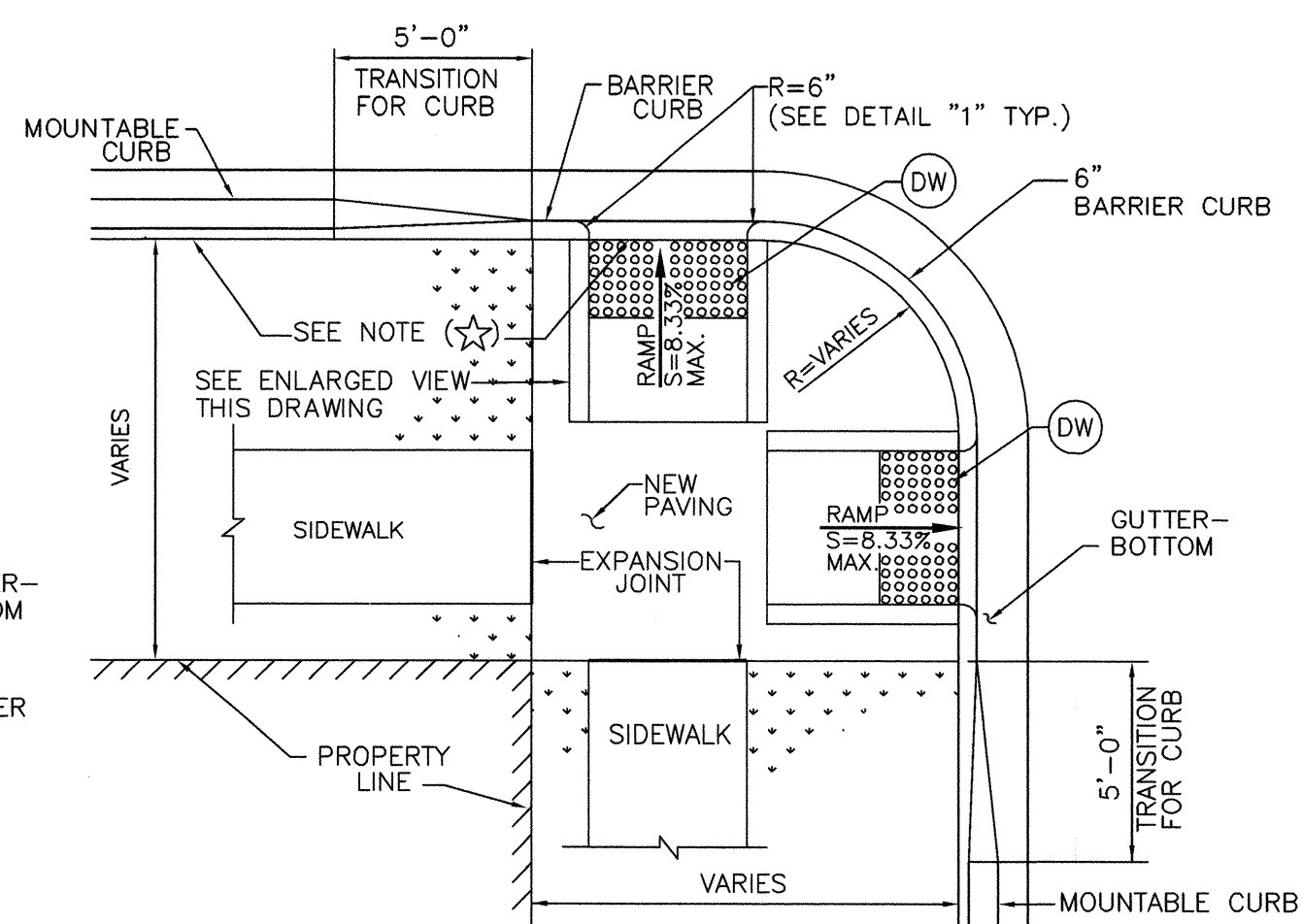
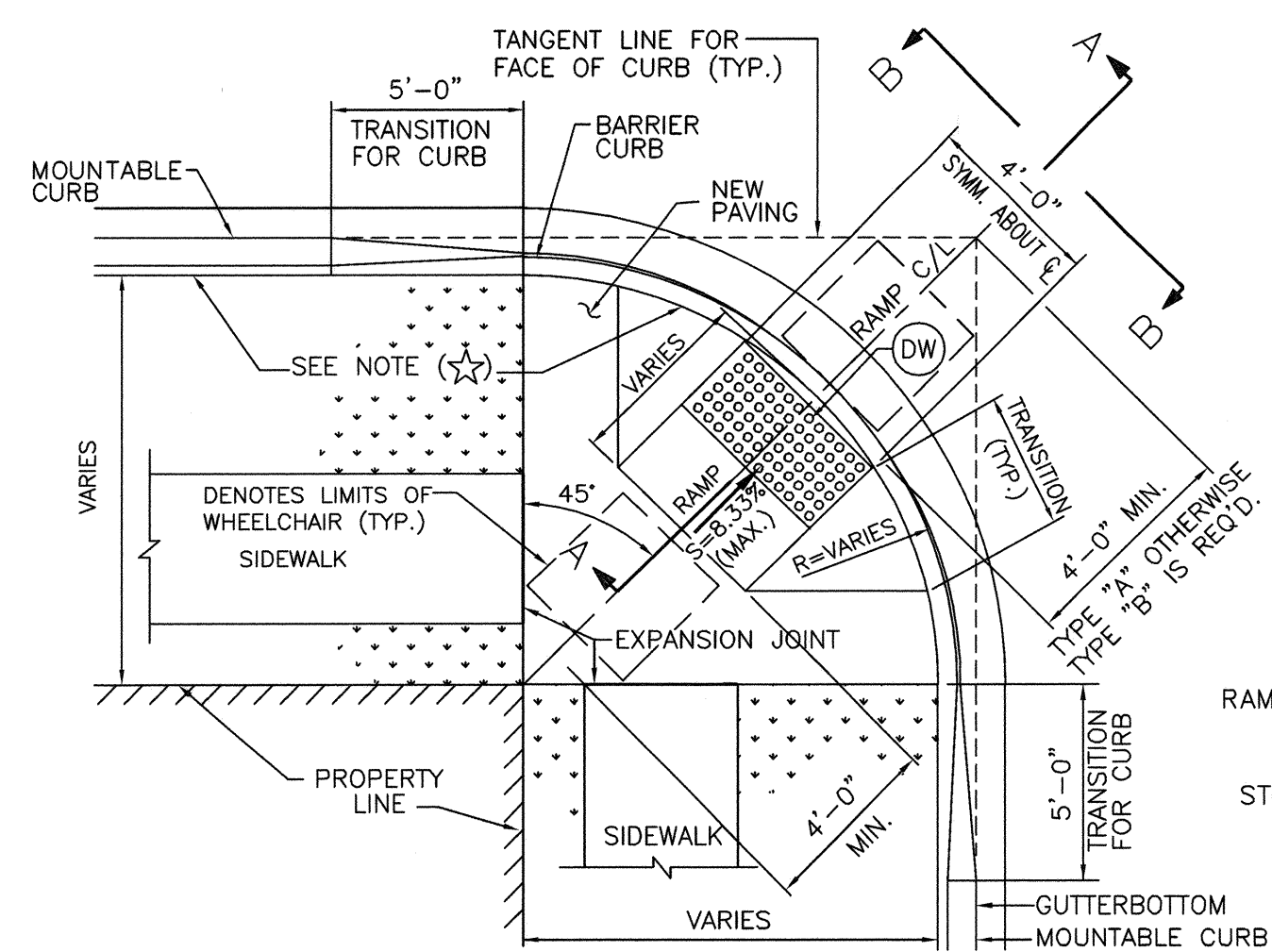
Paver units shall have a truncated dome top surface for detectable warning to pedestrians.

Paver units shall be saw cut only and any cut unit shall not be less than 25 percent of a full unit.

Truncated Dome System shall be paid for in accordance with the applicable sections of the Standard Specifications.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	CURB RAMPS FOR STREET CONSTRUCTION		
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DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JERINOV, DIRECTOR	DRAWING No. ADA4



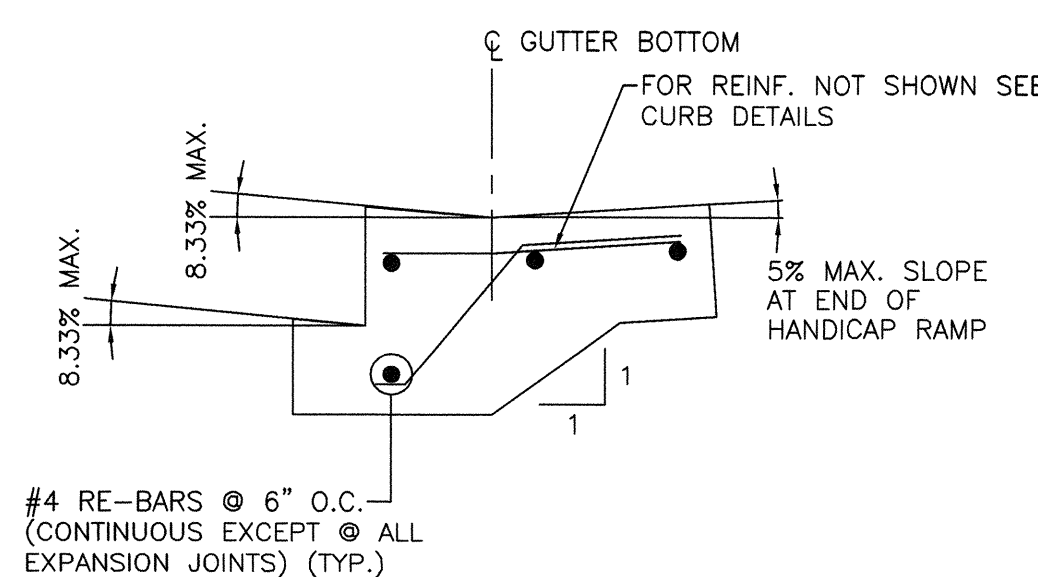
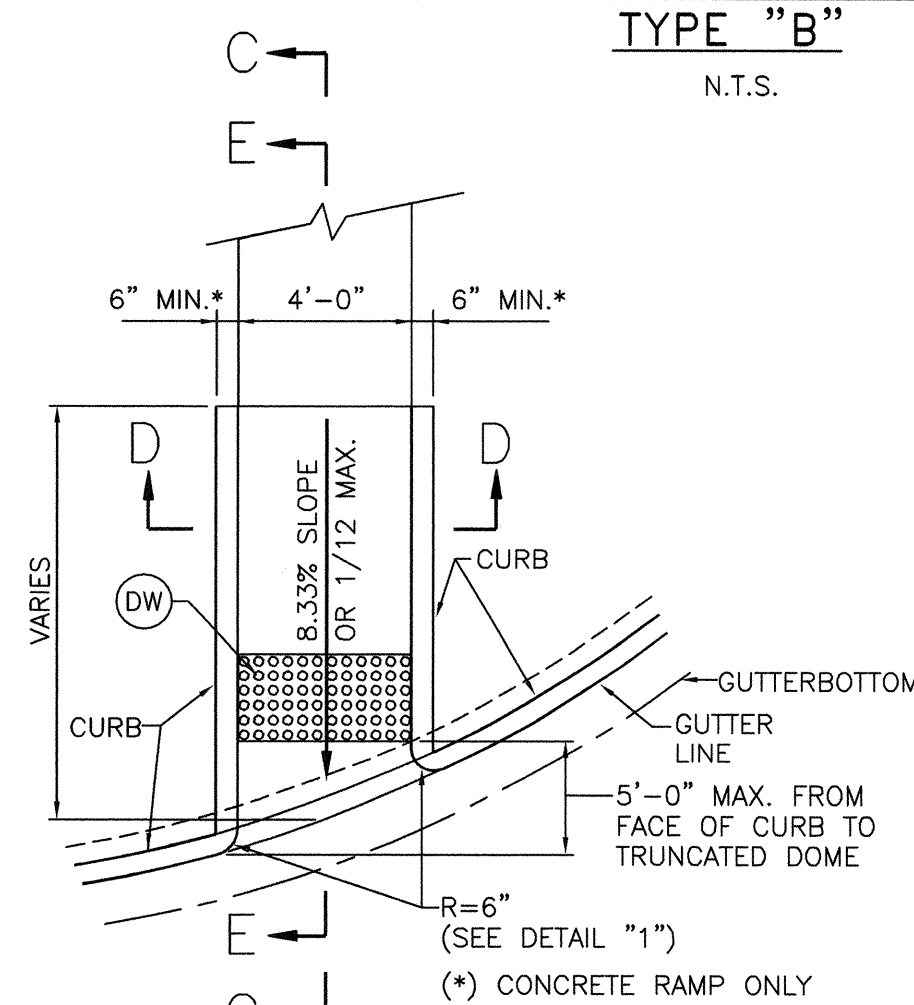
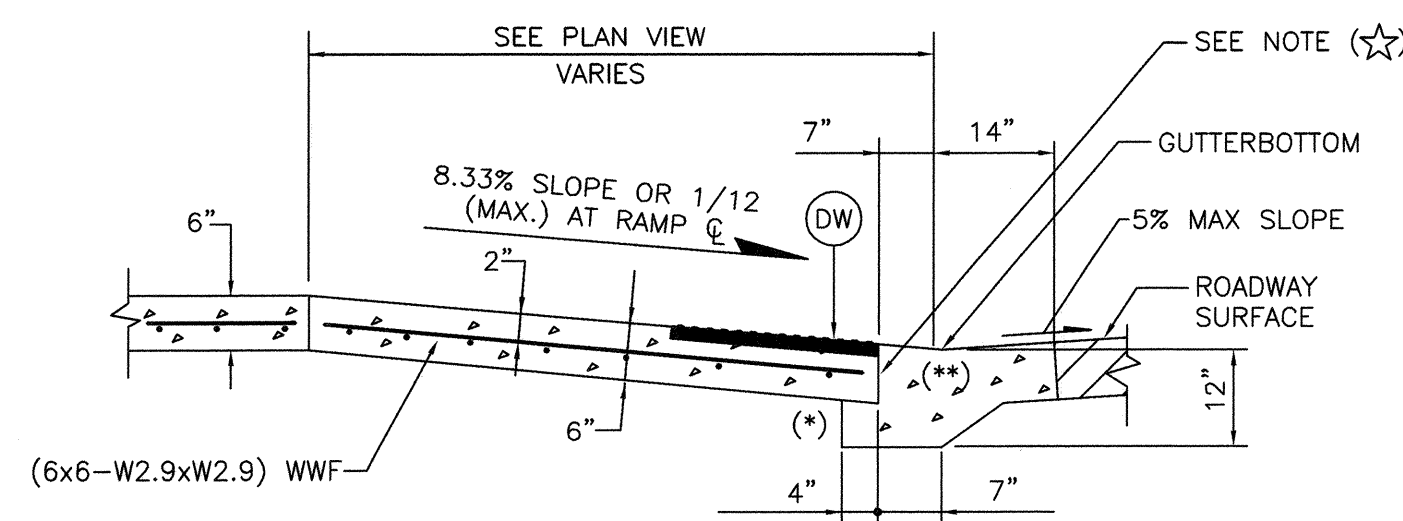


- NOTES:**
- (A) LOCATION
- (1) STREET INTERSECTIONS AS SHOWN ON DRAWINGS.
  - (2) ACTUAL LOCATION OF RAMPS MAY VARY AS DIRECTED BY THE ENGINEER TO ACCOMMODATE EXISTING SITE CONDITIONS.
  - (3) THE CONTRACTOR SHALL COORDINATE RAMP LOCATIONS WITH UTILITY POWER POLE RELOCATIONS. RAMP LOCATIONS MAY SHIFT AS DIRECTED BY THE ENGINEER TO AVOID CONFLICT.
  - (4) ALL HANDICAPPED RAMPS SHALL INCLUDE DETECTABLE WARNINGS AND BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF PUBLIC WORKS STANDARD PLAN AND THE LATEST ADA REQUIREMENTS.
  - (5) DETECTABLE WARNINGS, I.E. RAISED TRUNCATED DOMES, SHALL BE USED BETWEEN PEDESTRIAN CIRCULATION AREAS AND VEHICULAR CIRCULATION OR PARKING AREAS FOR COMMERCIAL DRIVEWAYS ONLY.
  - (6) RAISED TRUNCATED DOMES SHALL BE 0.9 INCHES IN NOMINAL DIAMETER, 0.2 INCHES IN NOMINAL HEIGHT, AND CENTERED 2.35 INCHES APART. THE AREA REQUIRED TO HAVE A DETECTABLE WARNING SHALL VISUALLY CONTRAST IN COLOR AND SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. (ADAAG, 1994 ED.)
  - (7) RAISED TRUNCATED DOMES SHALL BE 24" (MIN.) SYSTEMS. THE TILE TYPE, SIZE, SHAPE, INSTALLATION METHODS, ETC., MUST BE APPROVED BY THE D.P.W. BEFORE THE CONTRACTOR ORDERS HIS MATERIALS.
- (B) CONSTRUCTION
- (1) THE SLOPE OF THE RAMP SHALL NOT EXCEED 8%.
  - (2) THE SLOPE OF THE SIDEWALK AND SIDEWALK TRANSITION SHALL NOT EXCEED 8%.
  - (3) THE WIDTH OF THE RAMP SHALL NOT BE LESS THAN 4'-0" BUT MAY EXCEED THIS WHERE NECESSARY.
  - (4) SURFACE TEXTURE OF THE CONCRETE RAMP SHALL BE COMPLIED WITH ADA, THE LATEST EDITION.
  - (5) ALL CONCRETE SIDEWALK TO BE MINIMUM 3000 PSI EXCEPT AS OTHERWISE INDICATED.
- (\*) EXPANSION JOINT IS REQUIRED WHEN THE ENTIRE AREA IS PAVED. DOWEL BARS MAY BE USED AS AN OPTION AT THE DIRECTION OF THE CITY ENGINEER.
- (DW) DETECTABLE WARNINGS MUST MEET 70% CONTRAST LIGHT REFLECTANCE AS REQUIRED BY THE LATEST ADA TRUNCATED DOME TILE (TYP.) SEE NOTES (4) THRU (7).

CONCRETE HANDICAPPED RAMP TYPE "A" N.T.S.

CONCRETE HANDICAPPED RAMP TYPE "B" N.T.S.

BRICK HANDICAPPED RAMP TYPE "B" SIMILAR EXCEPT AS NOTED N.T.S.

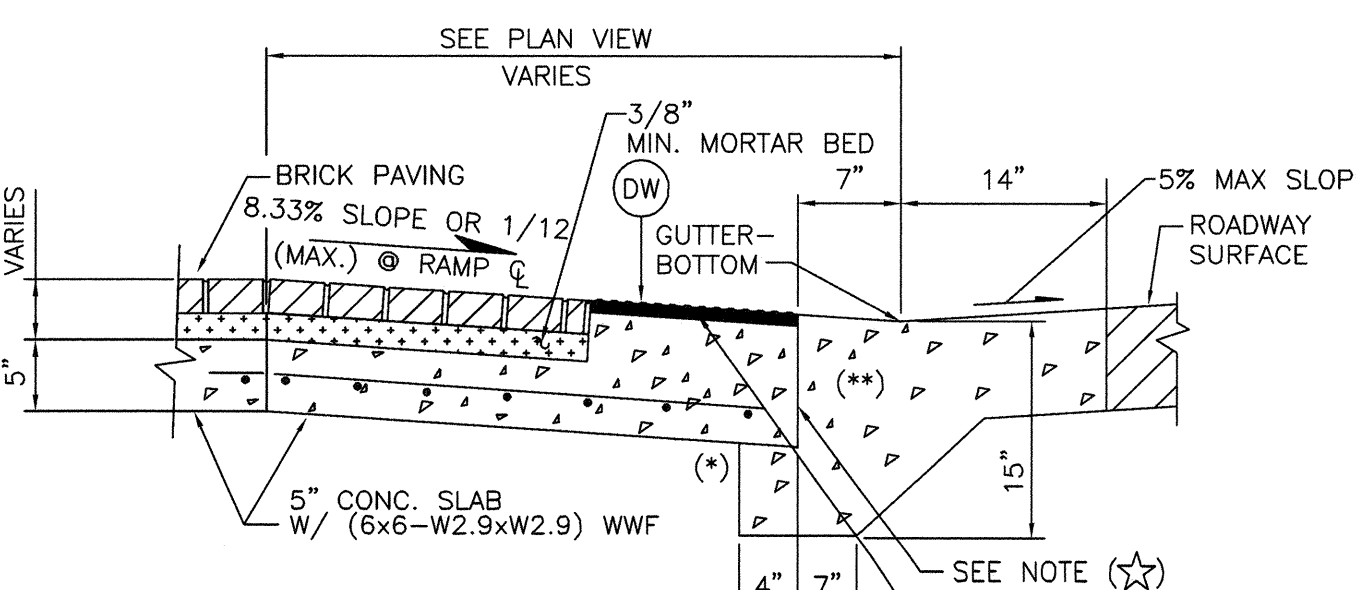
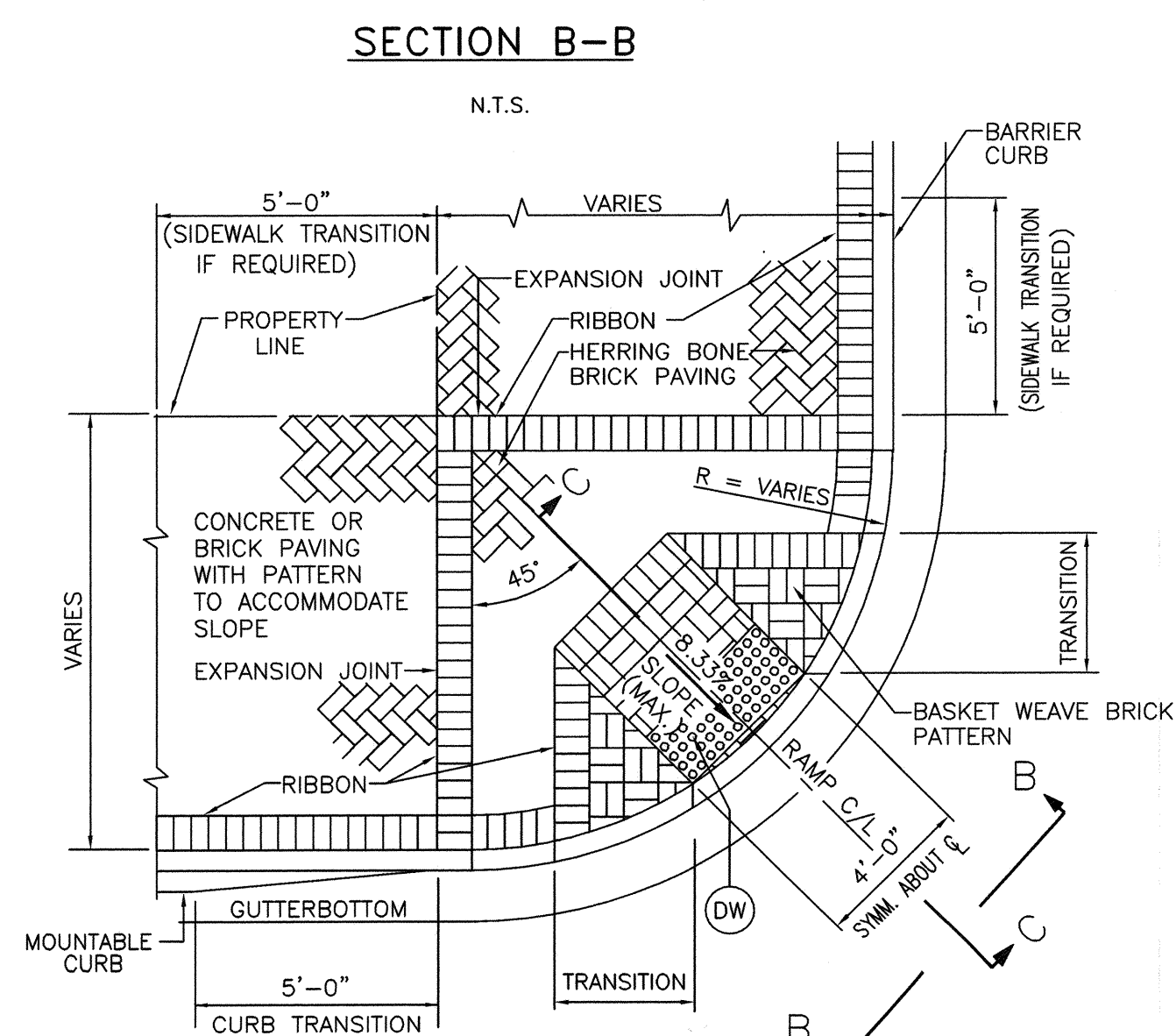
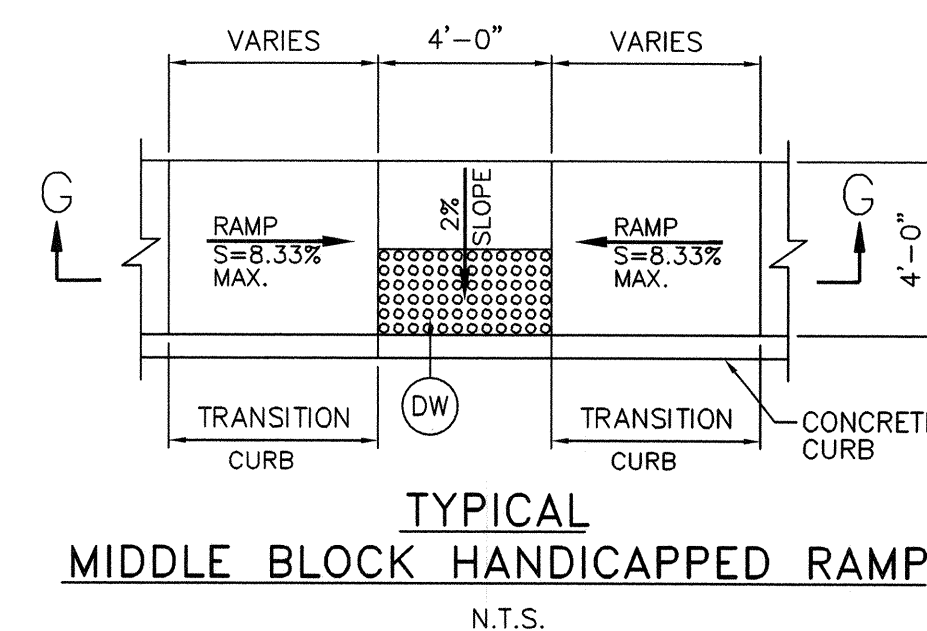
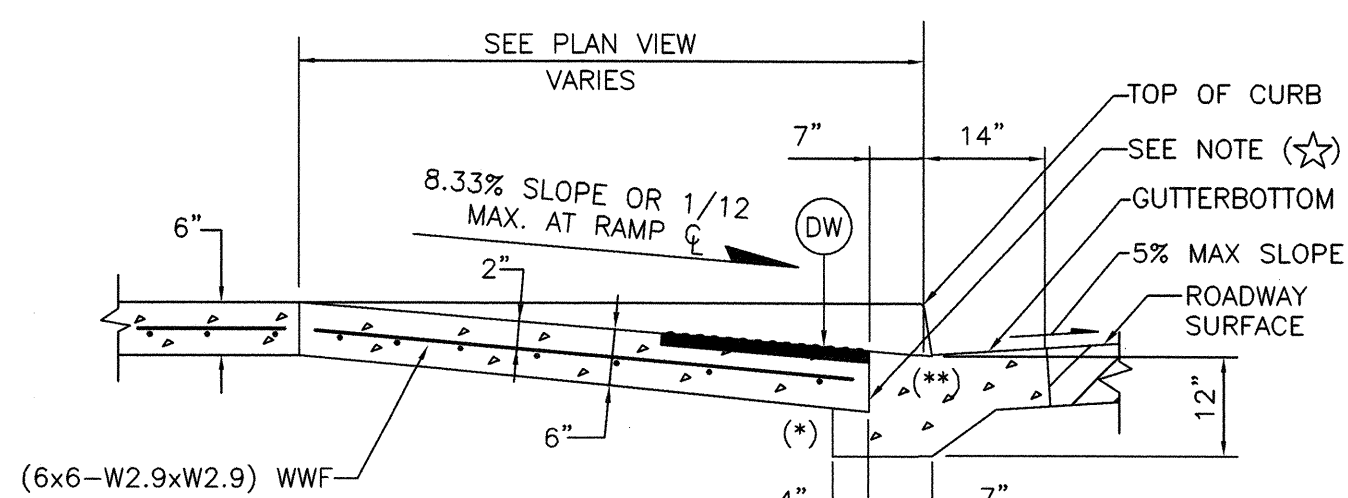
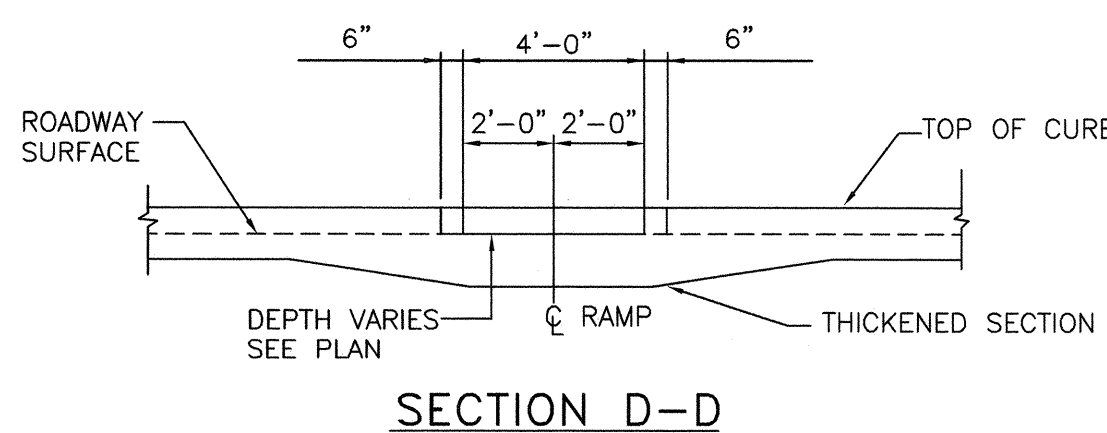
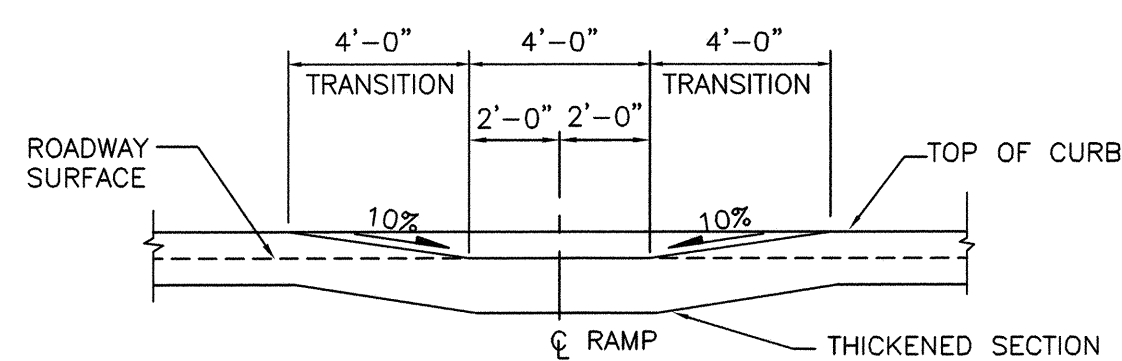


(\*) DOWELED EXPANSION JOINT MAY BE USED AS ALTERNATE OF KEYWAY (SEE SECTION E-E, STD7)

(\*\*) SEE DETAIL "2"

ENLARGED VIEW OF HANDICAPPED RAMP TYPE "B" N.T.S.

DETAIL "2" N.T.S.



(\*) DOWELED EXPANSION JOINT MAY BE USED AS ALTERNATE OF KEYWAY (SEE SECTION E-E, STD7)

(\*\*) SEE DETAIL "2"

TRUNCATED DOME SQUARE PATTERN N.T.S.

(\*) DOWELED EXPANSION JOINT MAY BE USED AS ALTERNATE OF KEYWAY (SEE SECTION E-E, STD7)

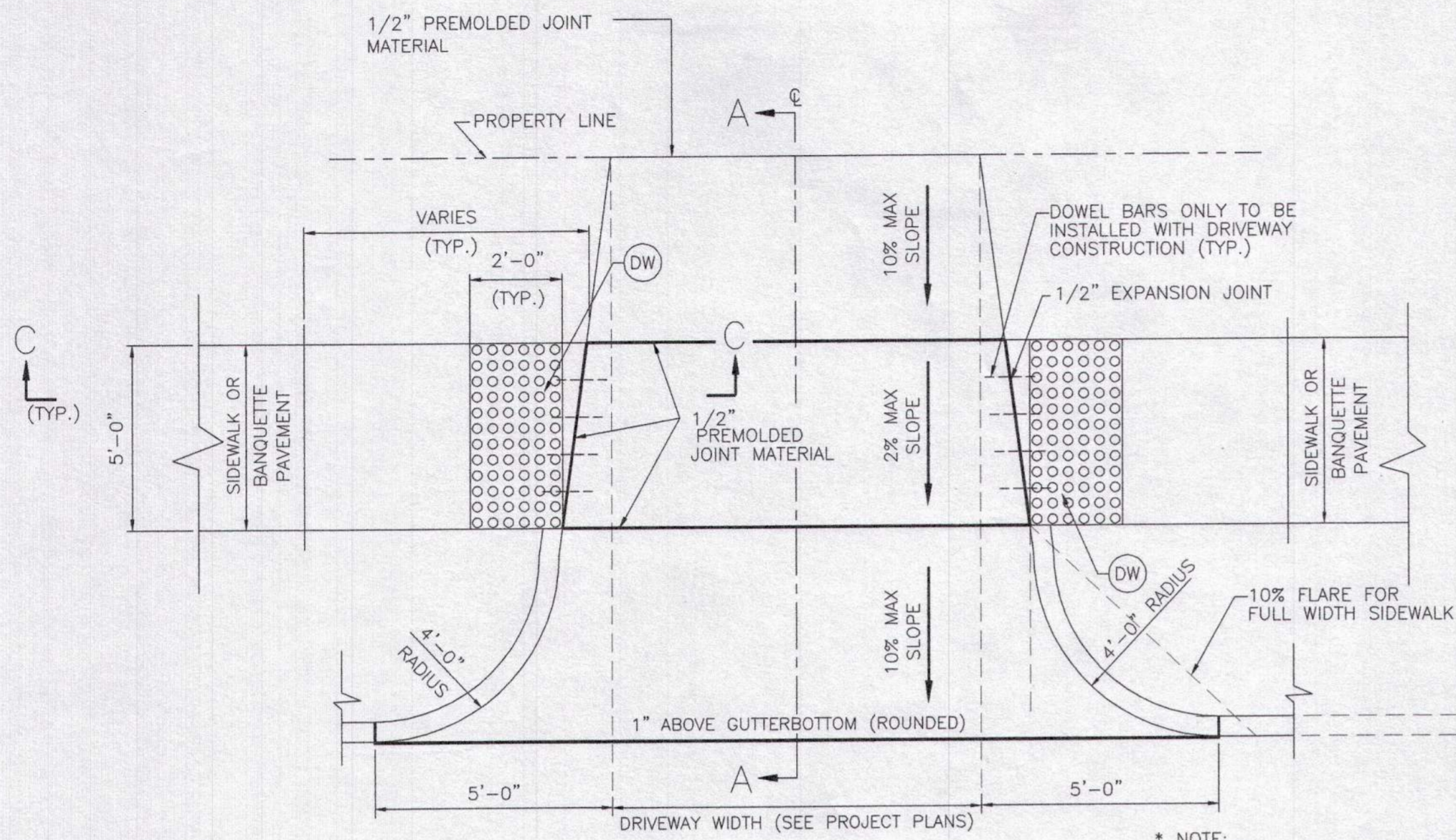
SECTION C-C (BRICK RAMP) N.T.S.

FOR THE VIEUX GARRE USE 12"x12" GRANITE PAVERS WITH TRUNCATED DOMES SET IN MORTAR BED

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	CONCRETE & BRICK HANDICAPPED RAMPS FOR STREET CONSTRUCTION		
DRAWN BY: R. FERGUSON	REVIEWED BY: M.T. B.V. R.S. R.H. A.Y.	RECOMMENDED BY: 	DRAWING No. <b>STD6</b>
DATE: 12-16-2009	SCALE: AS NOTED	APPROVED: 12-16-09 ROBERT C. MENDOZA, DIRECTOR	

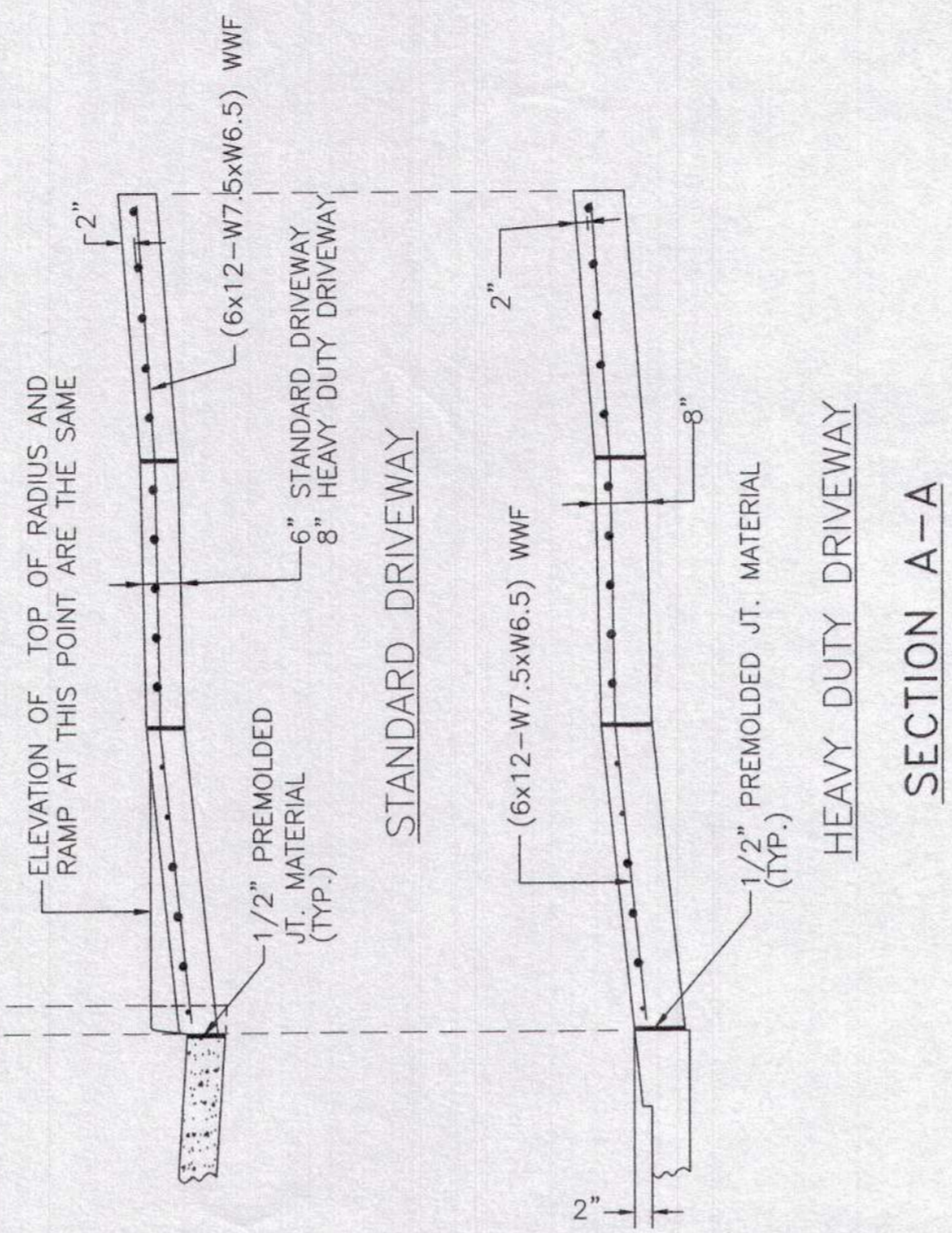
THE SELECTION AND USE OF THESE DETAILS, WHILE DESIGNED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES, IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A LOUISIANA REGISTERED PROFESSIONAL ENGINEER.



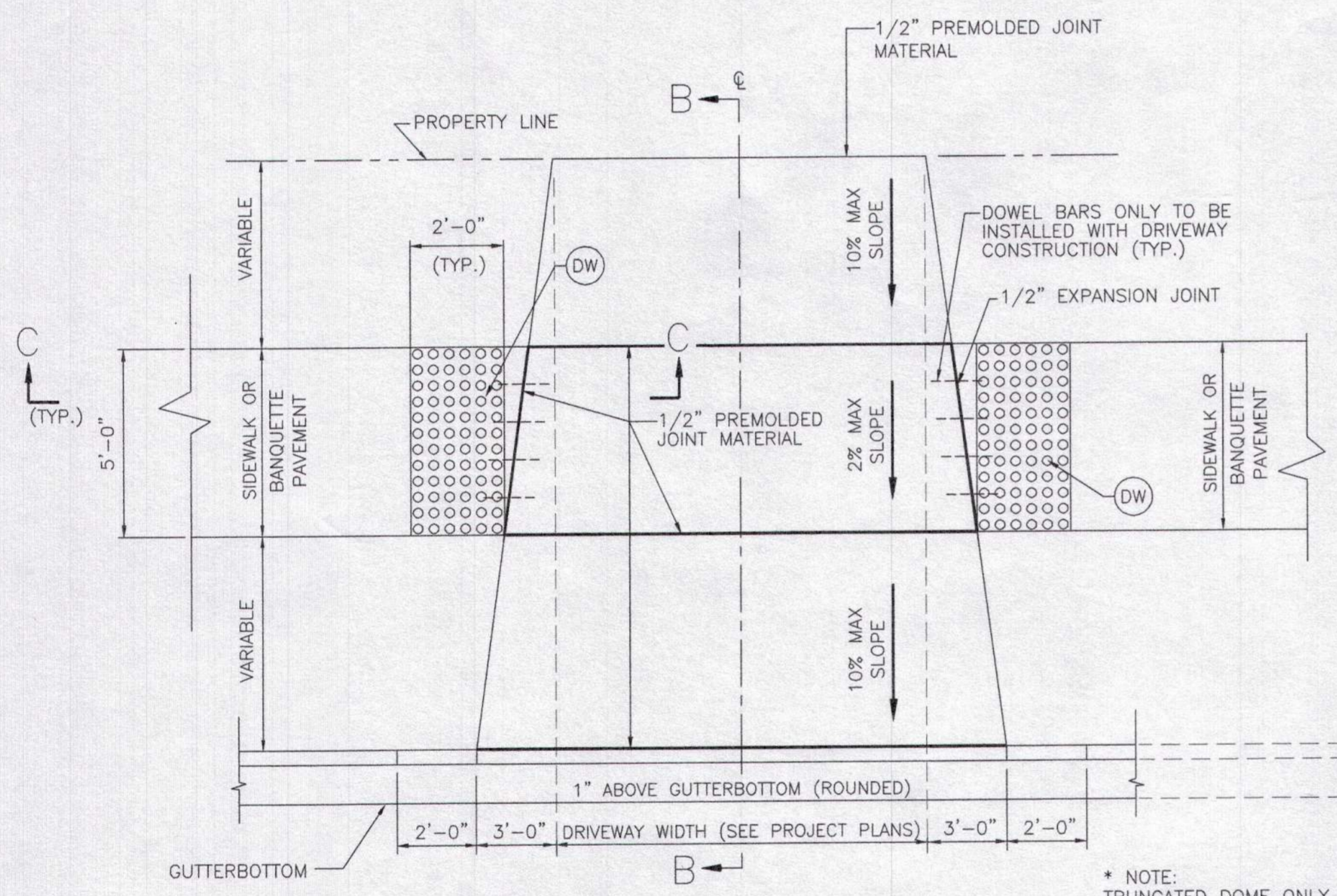


**DETAIL OF STANDARD DRIVEWAY FOR CONCRETE VERTICAL CURB**  
N.T.S.

\* NOTE:  
TRUNCATED DOME ONLY REQUIRED AT SIGNALIZED COMMERCIAL DRIVE CROSSING ONLY!  
\* SEE ADA2 FOR LAYOUT.

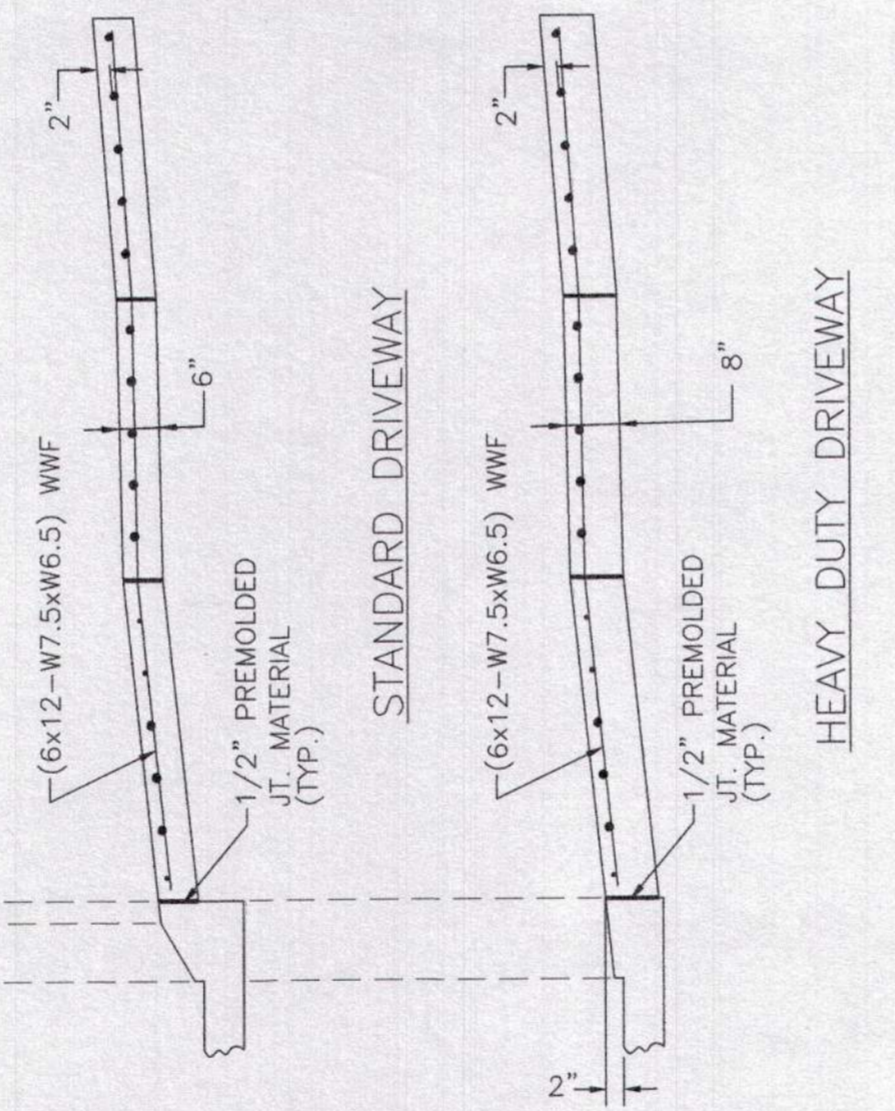


**SECTION A-A**  
N.T.S.

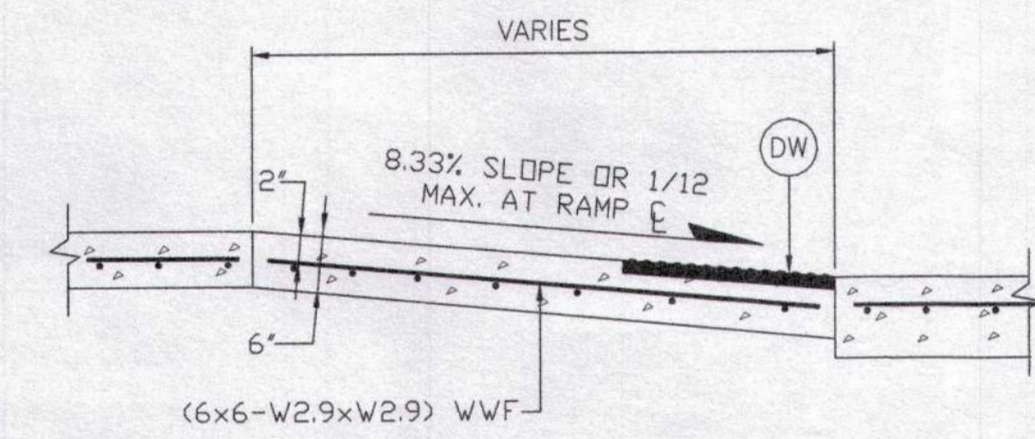


**DETAIL OF STANDARD DRIVEWAY FOR MOUNTABLE CURBS**  
N.T.S.

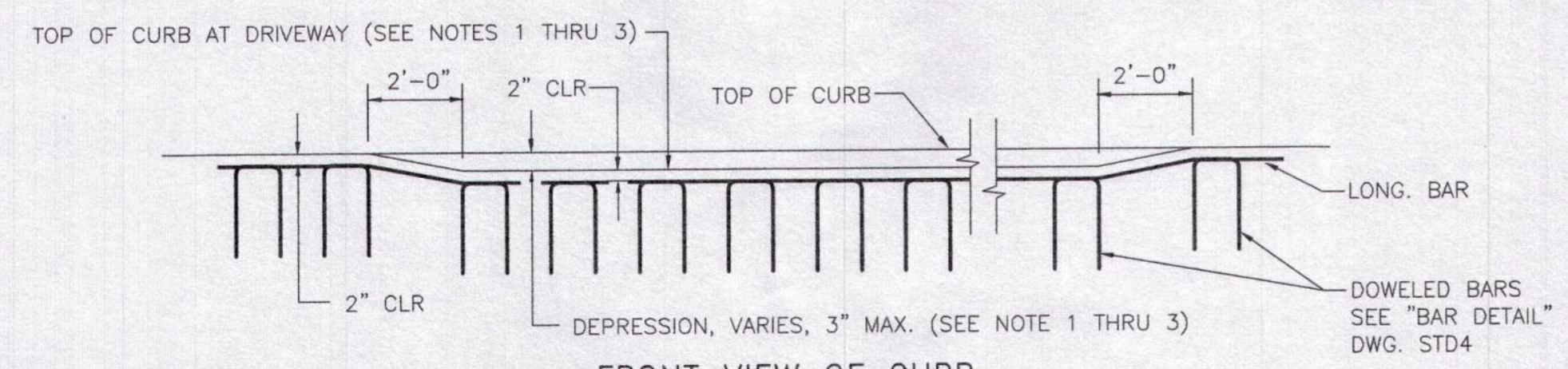
\* NOTE:  
TRUNCATED DOME ONLY REQUIRED AT SIGNALIZED COMMERCIAL DRIVE CROSSING ONLY!  
\* SEE ADA2 FOR LAYOUT.



**SECTION B-B**  
STANDARD & HEAVY DUTY DRIVEWAYS  
N.T.S.



**SECTION C-C**  
N.T.S.



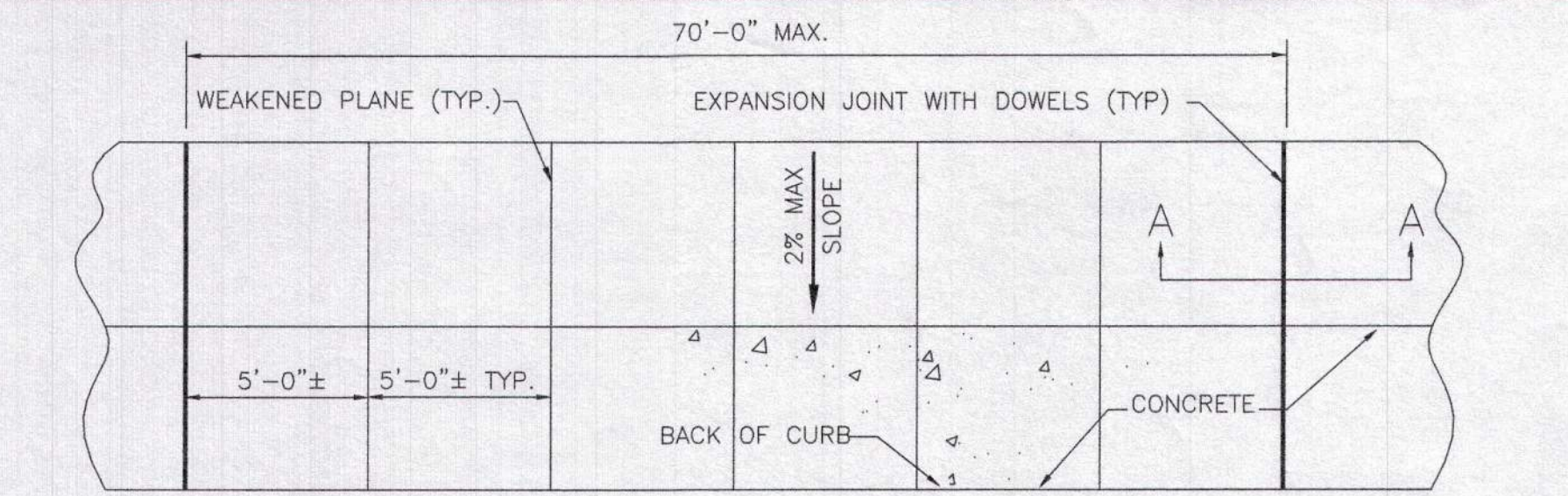
**FRONT VIEW OF CURB**  
**DETAIL OF HEAVY DUTY DRIVEWAYS FOR MOUNTABLE CONCRETE CURB**  
N.T.S.

- NOTES (\*):**
- (1) FOR STANDARD DRIVEWAYS: DEPRESS ONLY WHEN DIRECTED BY THE FIELD ENGINEER.
  - (2) FOR HEAVY DUTY DRIVEWAYS: DEPRESS 3" AS SHOWN.
  - (3) MAXIMUM DRIVEWAY SLOPE IS 10%. ANYTHING EXCEEDING 10% SHOULD BE APPROVED BY THE DEPARTMENT.
  - (4) DETECTABLE WARNINGS, I.E. RAISED TRUNCATED DOMES SHALL BE USED AT SIGNALIZED COMMERCIAL DRIVEWAYS ONLY.
  - (5) RAISED TRUNCATED DOMES SHALL BE 0.9 INCHES IN NOMINAL DIAMETER, 0.2 INCHES IN NOMINAL HEIGHT, AND CENTERED 2.35 INCHES APART. THE AREA REQUIRED TO HAVE A DETECTABLE WARNING SHALL VISUALLY CONTRAST IN COLOR AND SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. (PROWAG, LATEST ED.)
  - (6) RAISED TRUNCATED DOMES SHALL BE 24" x 48" (MIN.) SYSTEMS. THE TILE TYPE, SIZE, SHAPE, INSTALLATION METHODS, ETC., MUST BE APPROVED BY THE D.P.W. BEFORE THE CONTRACTOR ORDERS HIS MATERIALS.
  - (7) MAINTAIN SIDEWALK ELEVATION THRU DRIVEWAYS.

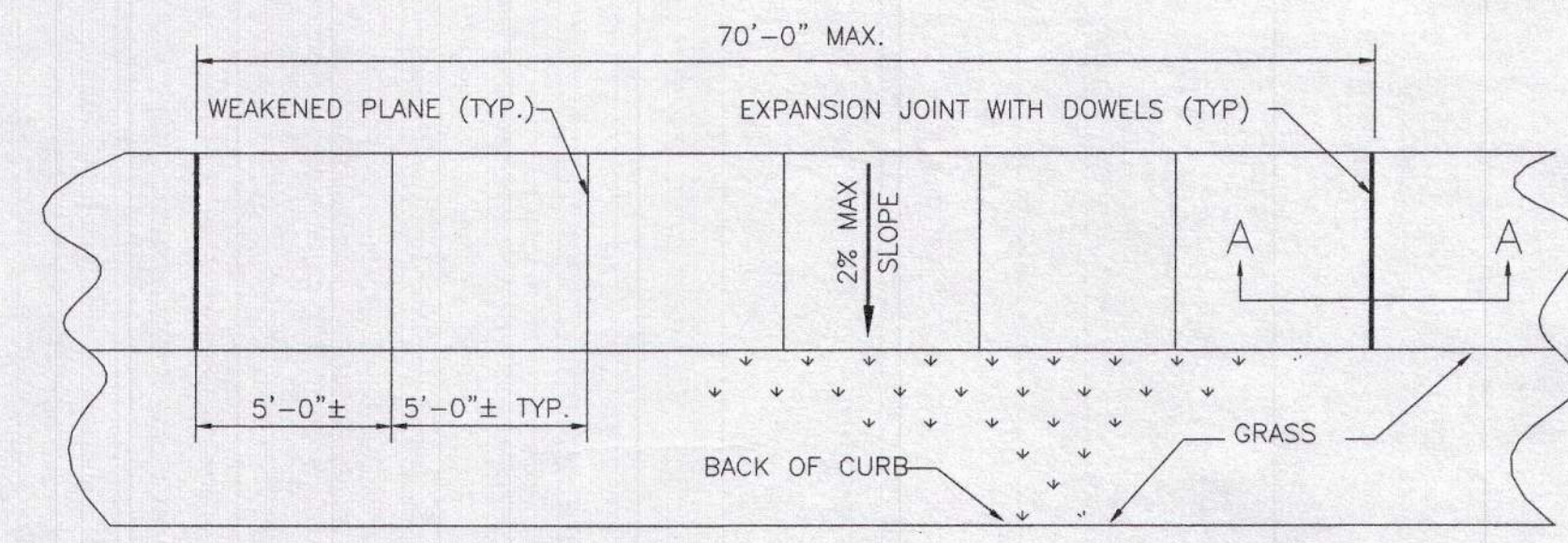
(DW) DETECTABLE WARNINGS (DARK GREY)  
(ADA) TRUNCATED DOME TILE (TYP.)  
AS PER APPROVAL OF D.P.W.  
SEE NOTES (4) THRU (6).

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	STANDARD DRIVEWAYS FOR STREET CONSTRUCTION		
THE SELECTION AND USE OF THESE DETAILS, WHILE DESIGNED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES, IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A LOUISIANA REGISTERED PROFESSIONAL ENGINEER.	DRAWN BY: J. LARMEU	REVIEWED BY: M.T. B.V. R.S. B.J. A.Y.	RECOMMENDED BY: NGUYEN D. PHAN, CHIEF ENGINEER
DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JERVIS, DIRECTOR	DRAWING No.  <b>DW1</b>

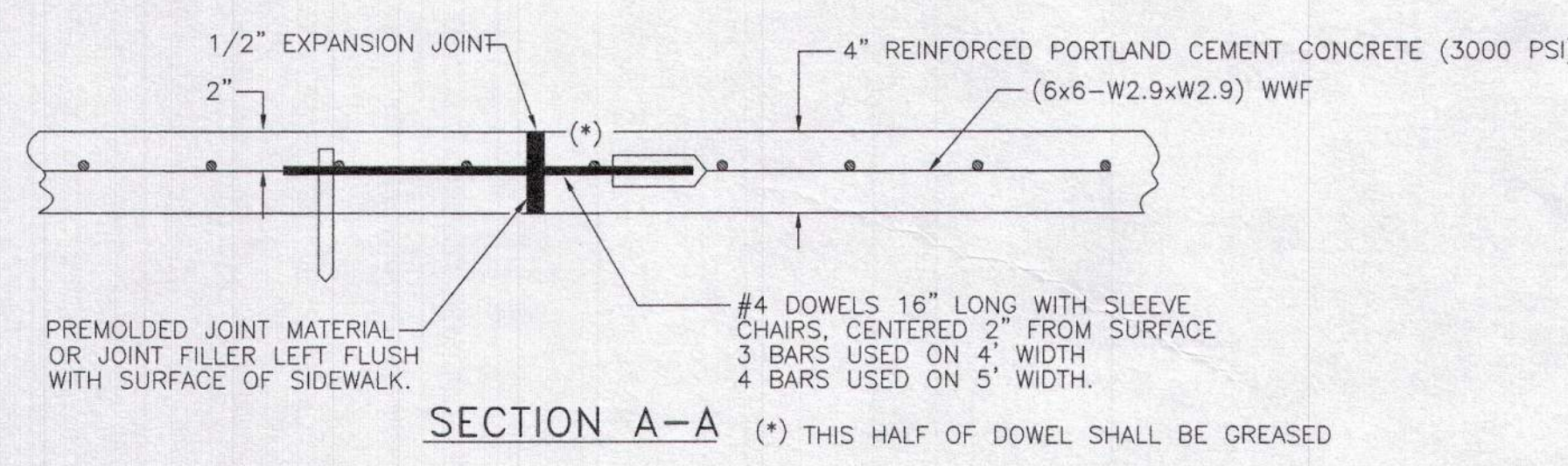




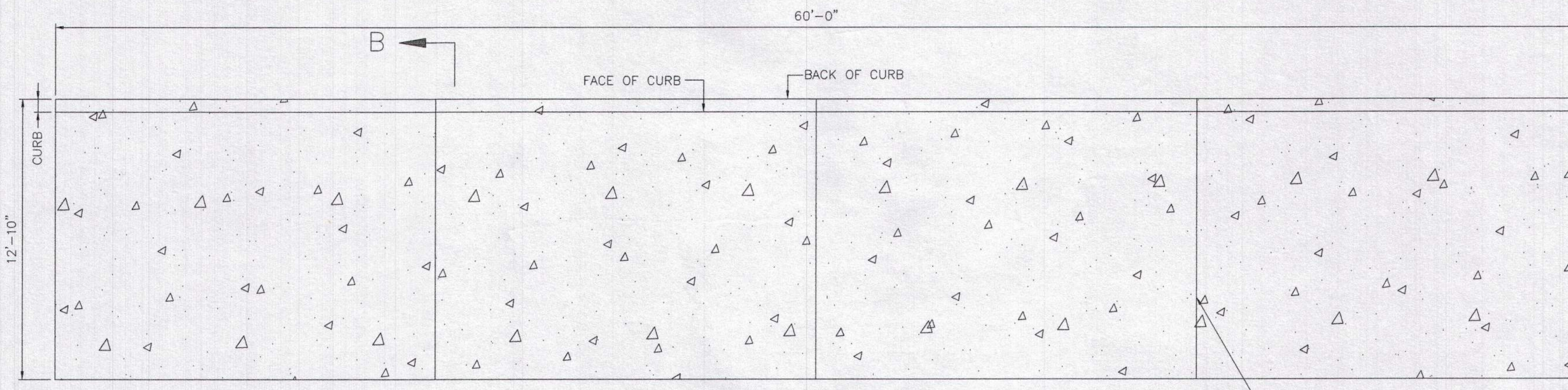
PLAN PORTLAND CEMENT CONCRETE SIDEWALK PAVEMENT (FULL)  
N.T.S.



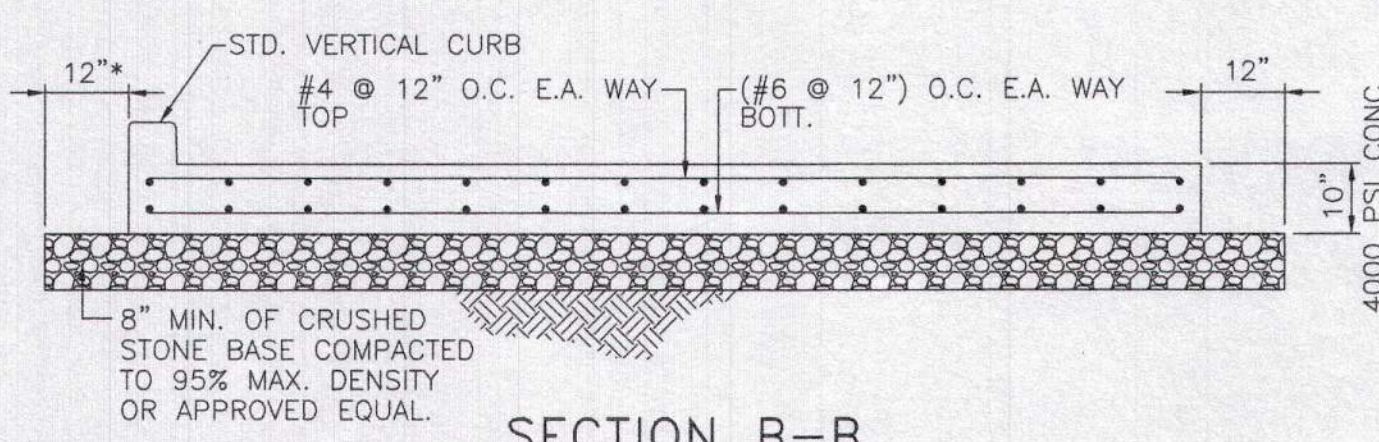
PLAN PORTLAND CEMENT CONCRETE SIDEWALK PAVEMENT (RIBBON)  
N.T.S.



SECTION A-A (\* THIS HALF OF DOWEL SHALL BE GREASED)

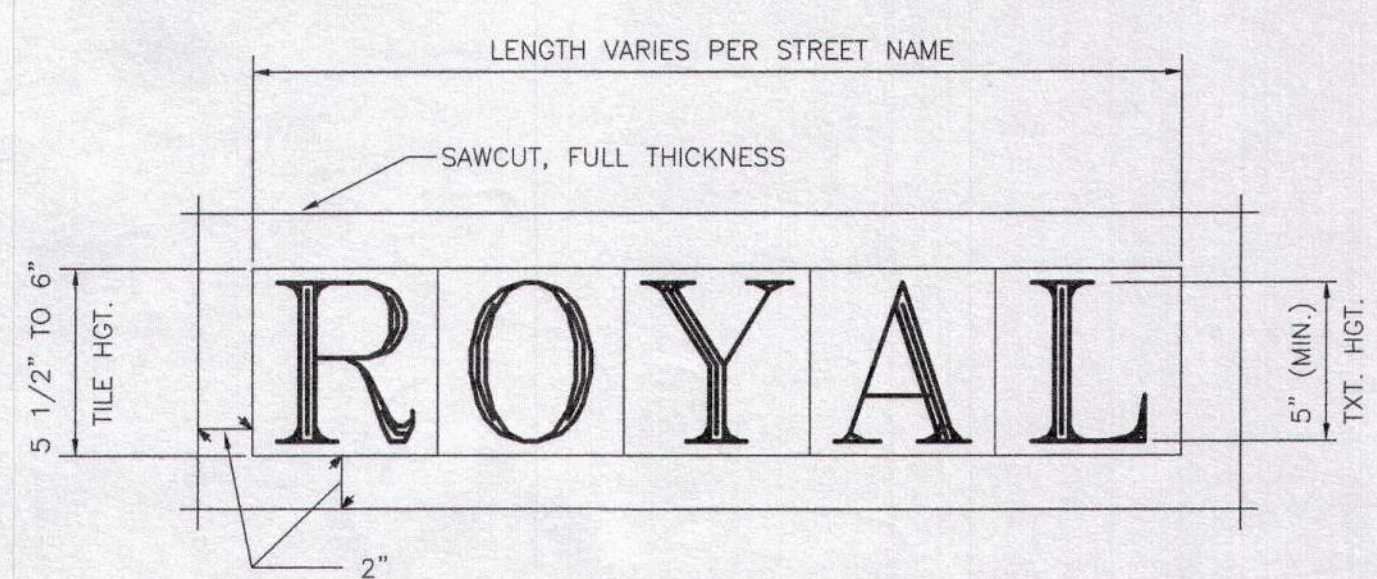


BUS PAD REPLACEMENT PLAN  
N.T.S.

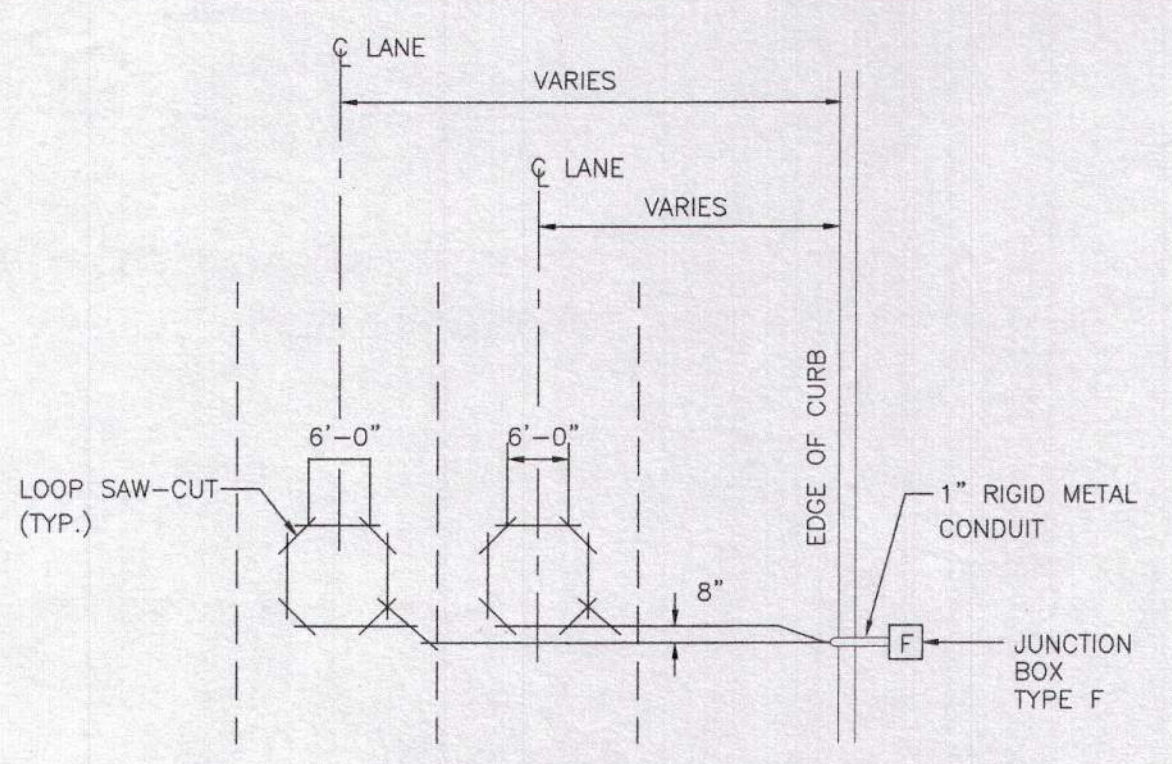


SECTION B-B  
N.T.S.

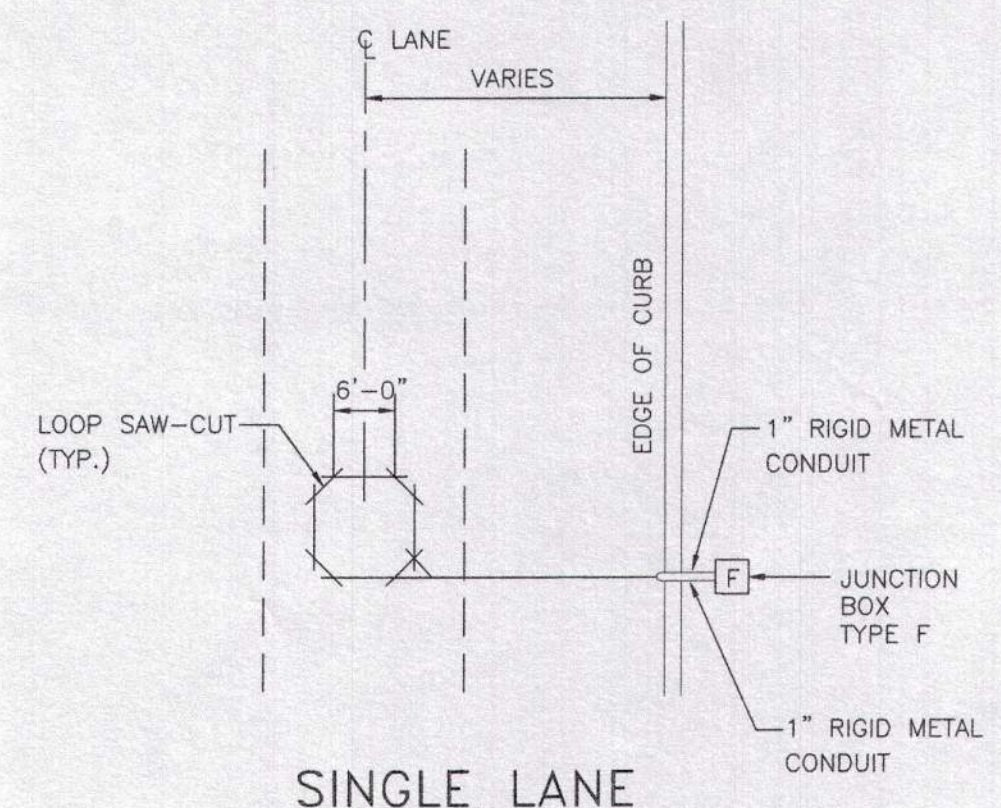
(\* DELETE WITHIN DRIPLINE OF TREES)



STREET NAME TILE  
N.T.S.



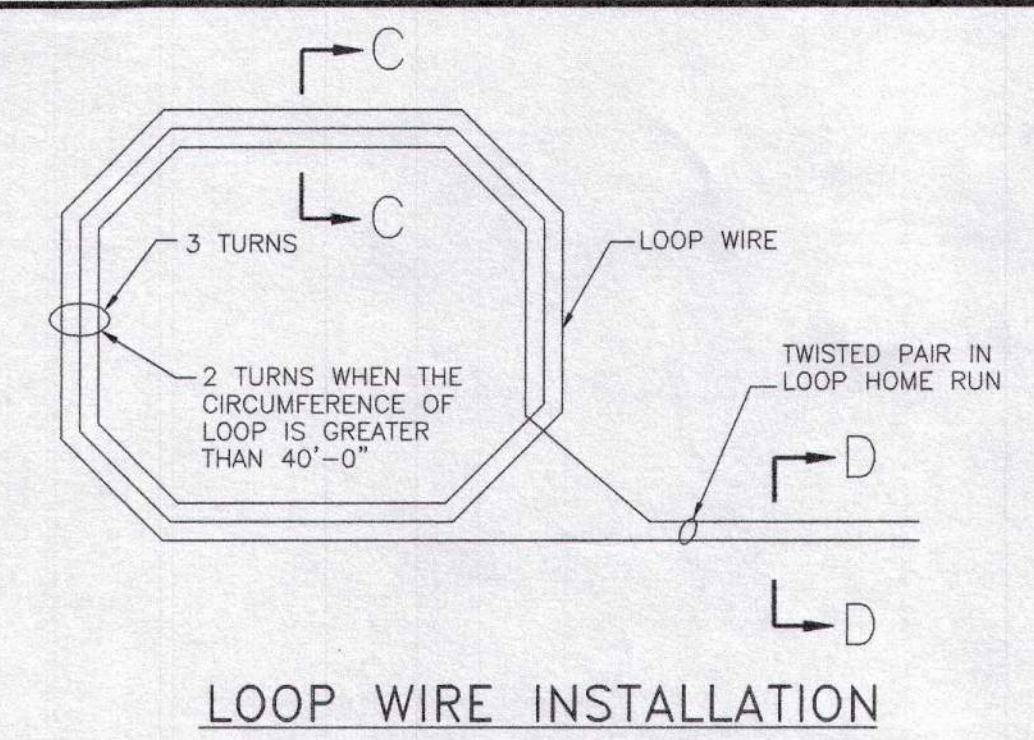
DOUBLE LANE



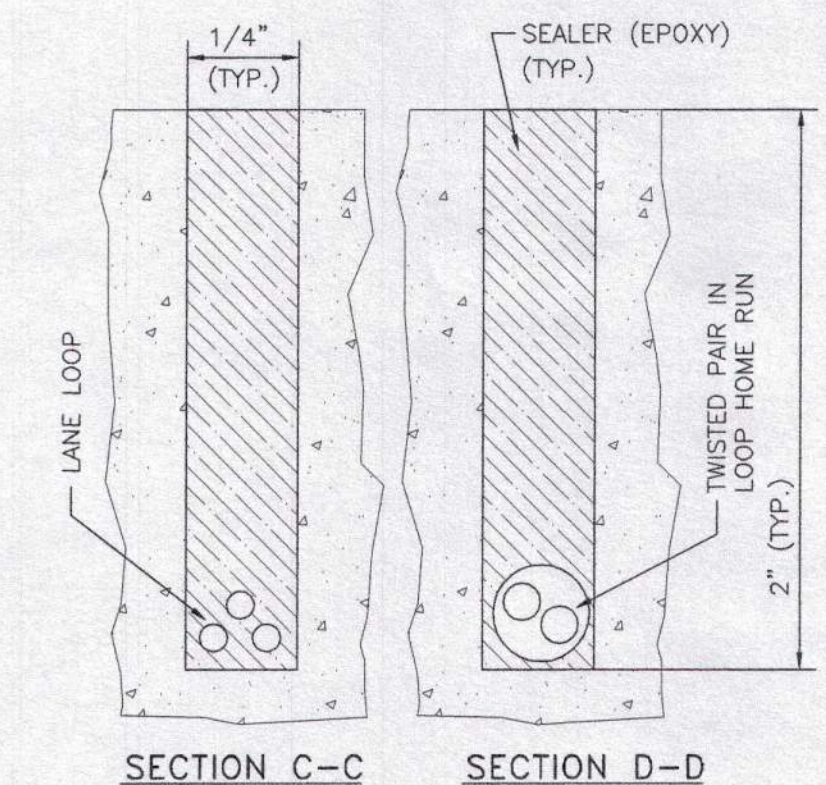
SINGLE LANE

NOTE:  
THE CONTRACTOR SHALL PROVIDE ONE INCH CONDUIT FROM JUNCTION BOX OR EQUIPMENT CABINET AND TERMINATE BELOW TOP OF PAVEMENT SO THAT IT DIRECTLY RECEIVES LOOP LEAD-IN WIRE.

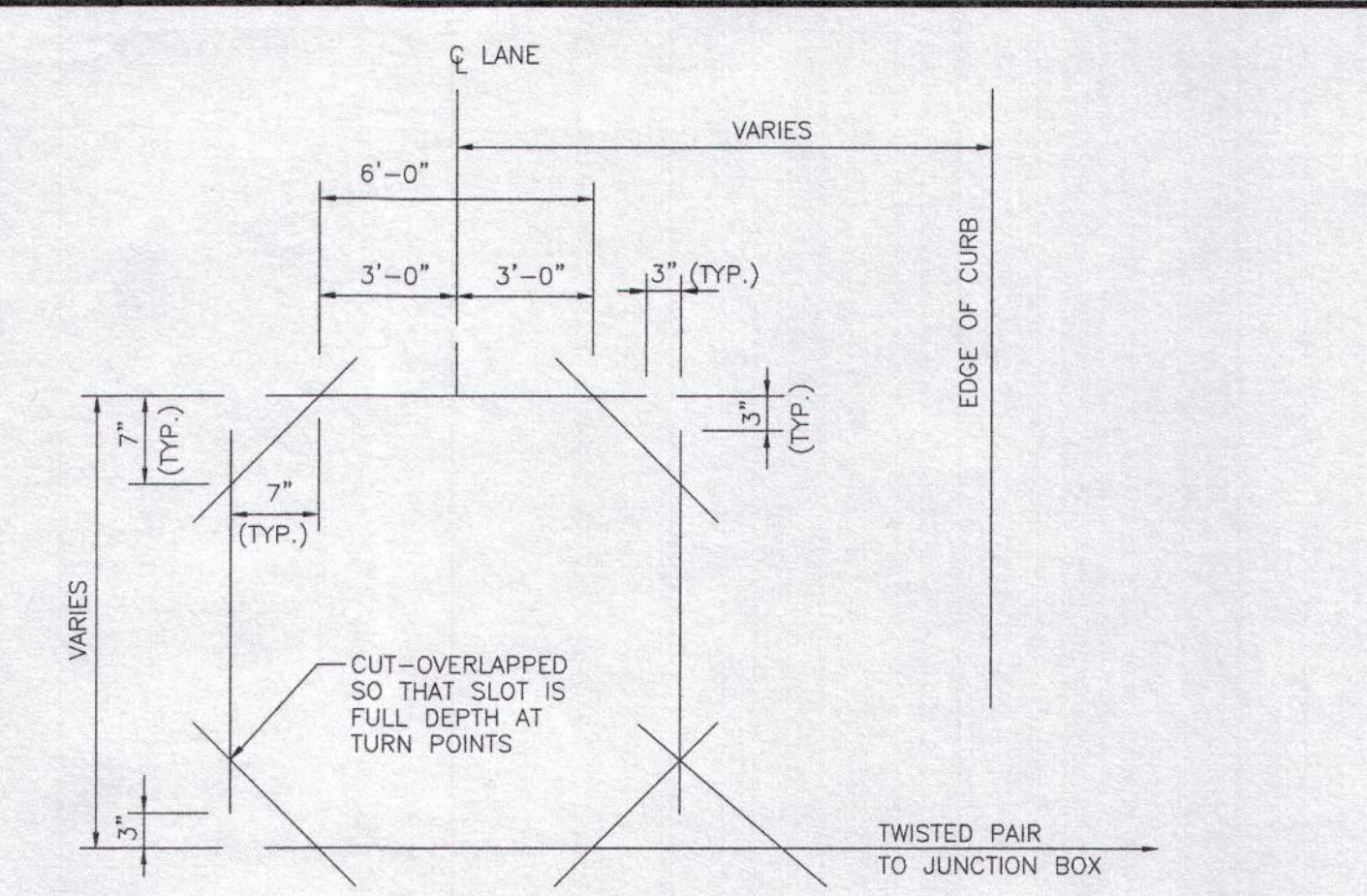
TYPICAL LOOP SAW-CUT LAYOUT



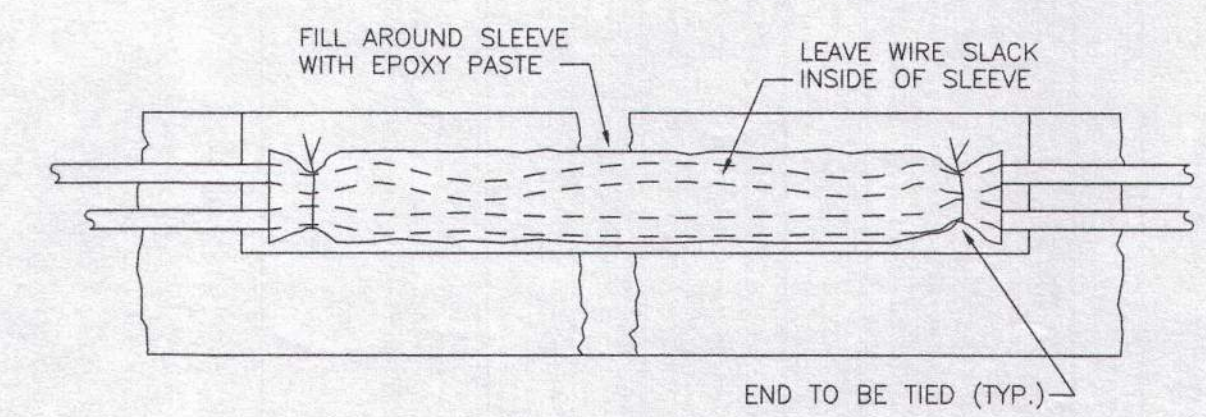
LOOP WIRE INSTALLATION



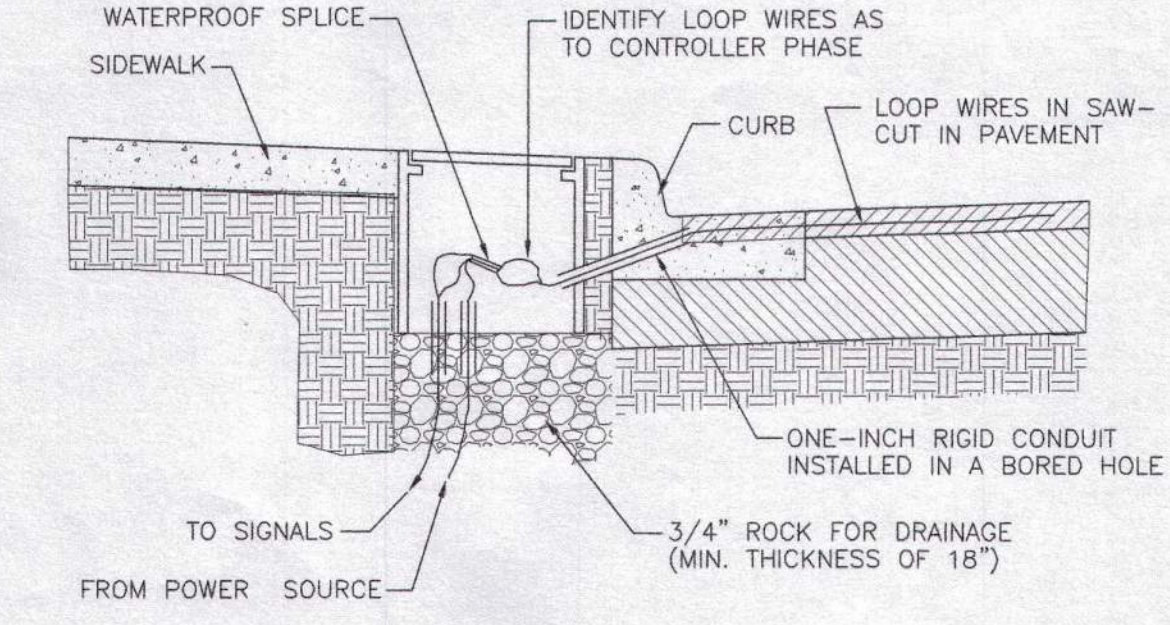
VEHICLE LOOP INSTALLATION



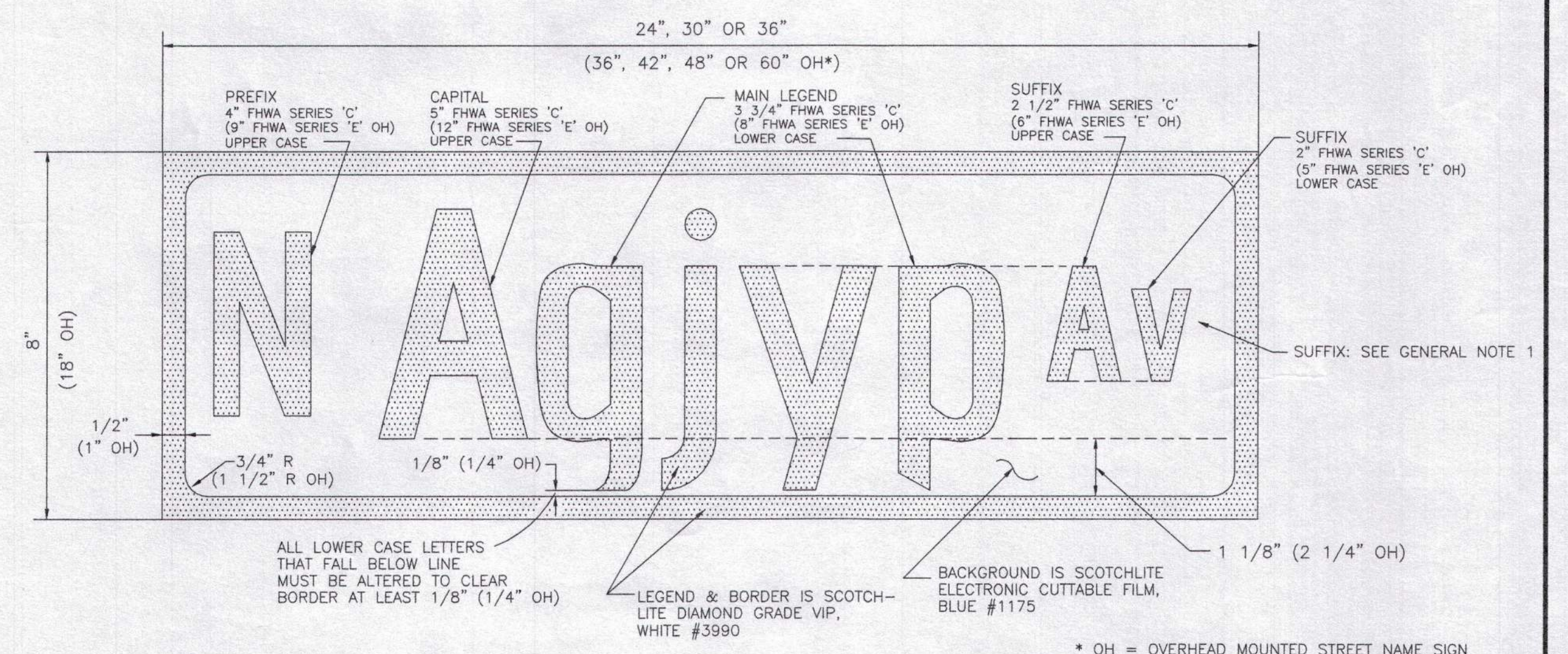
LOOP SAW-CUT CONFIGURATION



SECTION OF PLASTIC SLEEVING AT PAVEMENT JOINTS AND CRACKS



TYPICAL LOOP LEAD-IN INSTALLATION



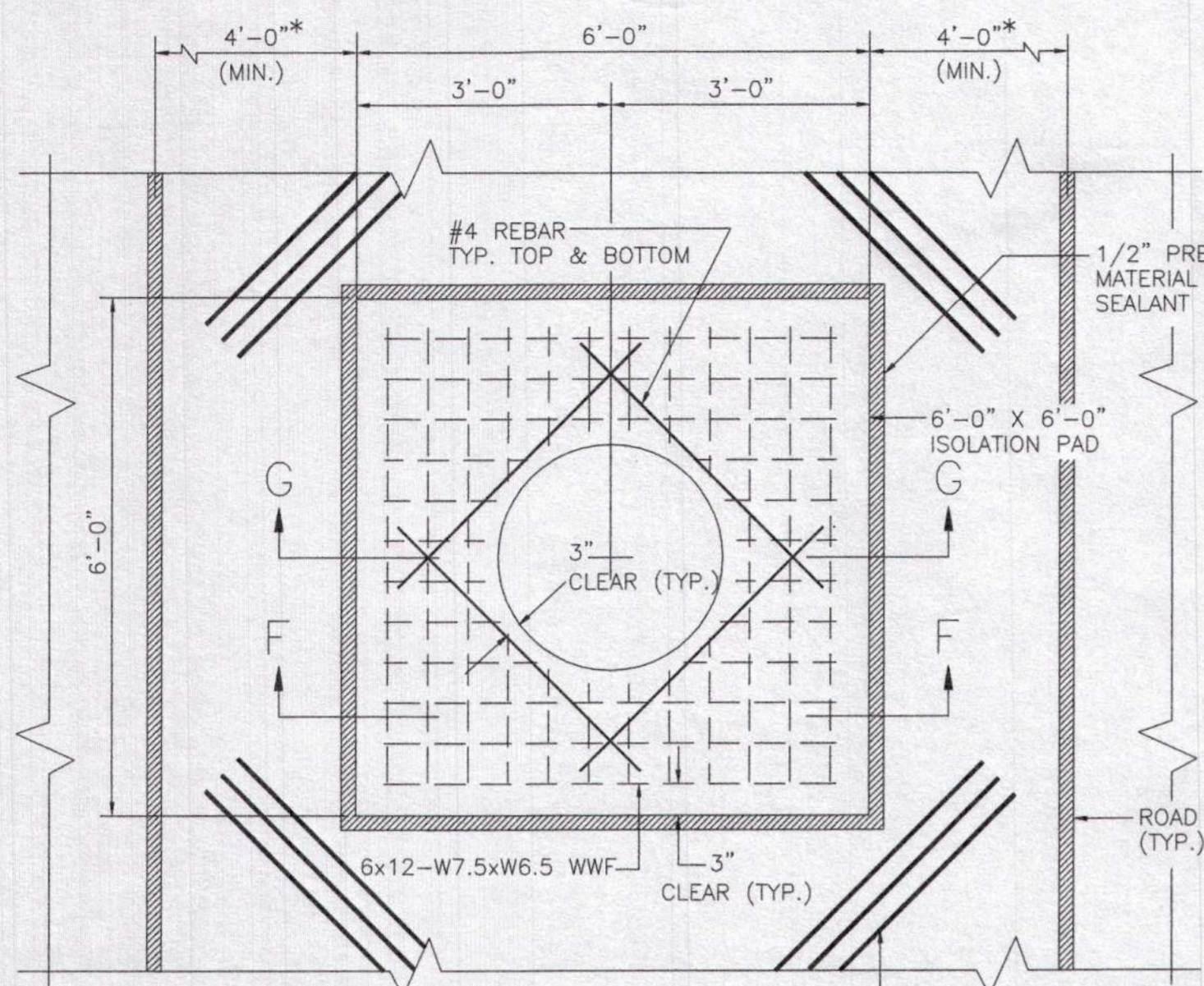
STREET NAME SIGN - LEGEND & BORDER  
N.T.S.

GENERAL NOTES:

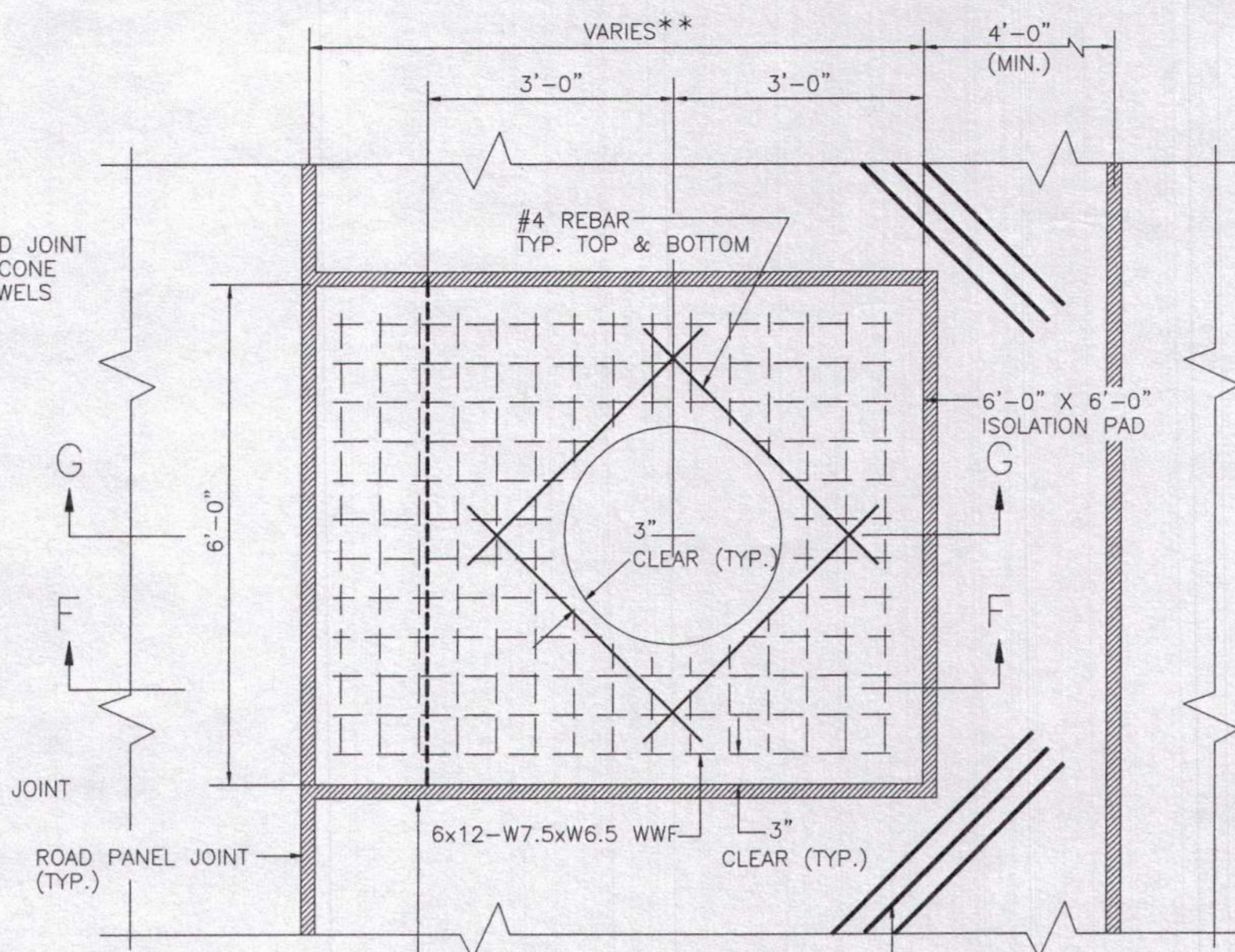
- (1) IF STREET NAME SUFFIX IS "STREET", SUFFIX IS OMITTED FROM SIGN.
- (2) REPLACEMENT STREET NAME TILES SHALL BE SET IN A 1/4"-1/2" MORTAR BED WITH A 1/4" (MAX. SPACING) BETWEEN LETTERS.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	MISCELLANEOUS DETAILS FOR STREET CONSTRUCTION		
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DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: MARK D. JERNIGAN, DIRECTOR	DATE: 2/3/2015

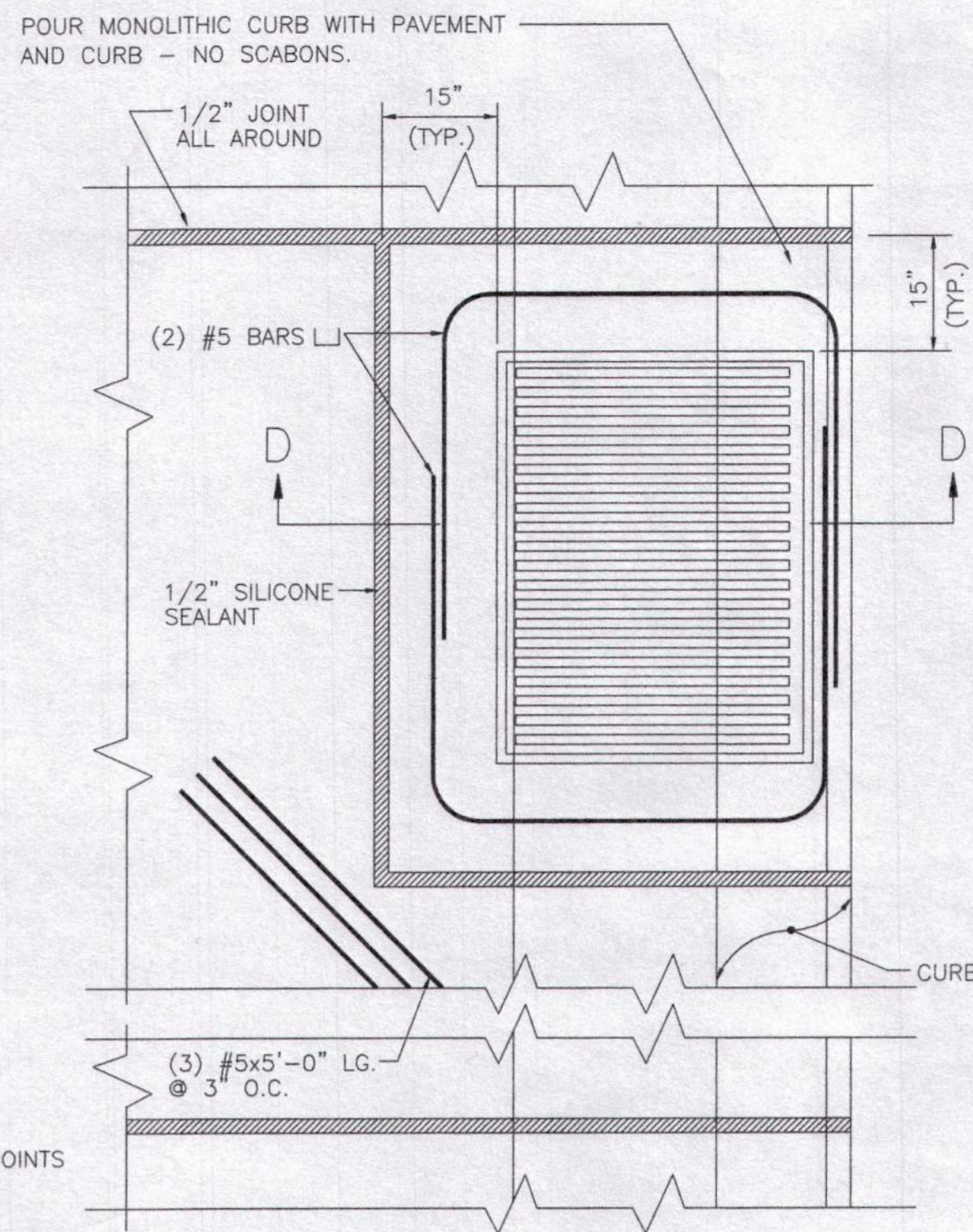




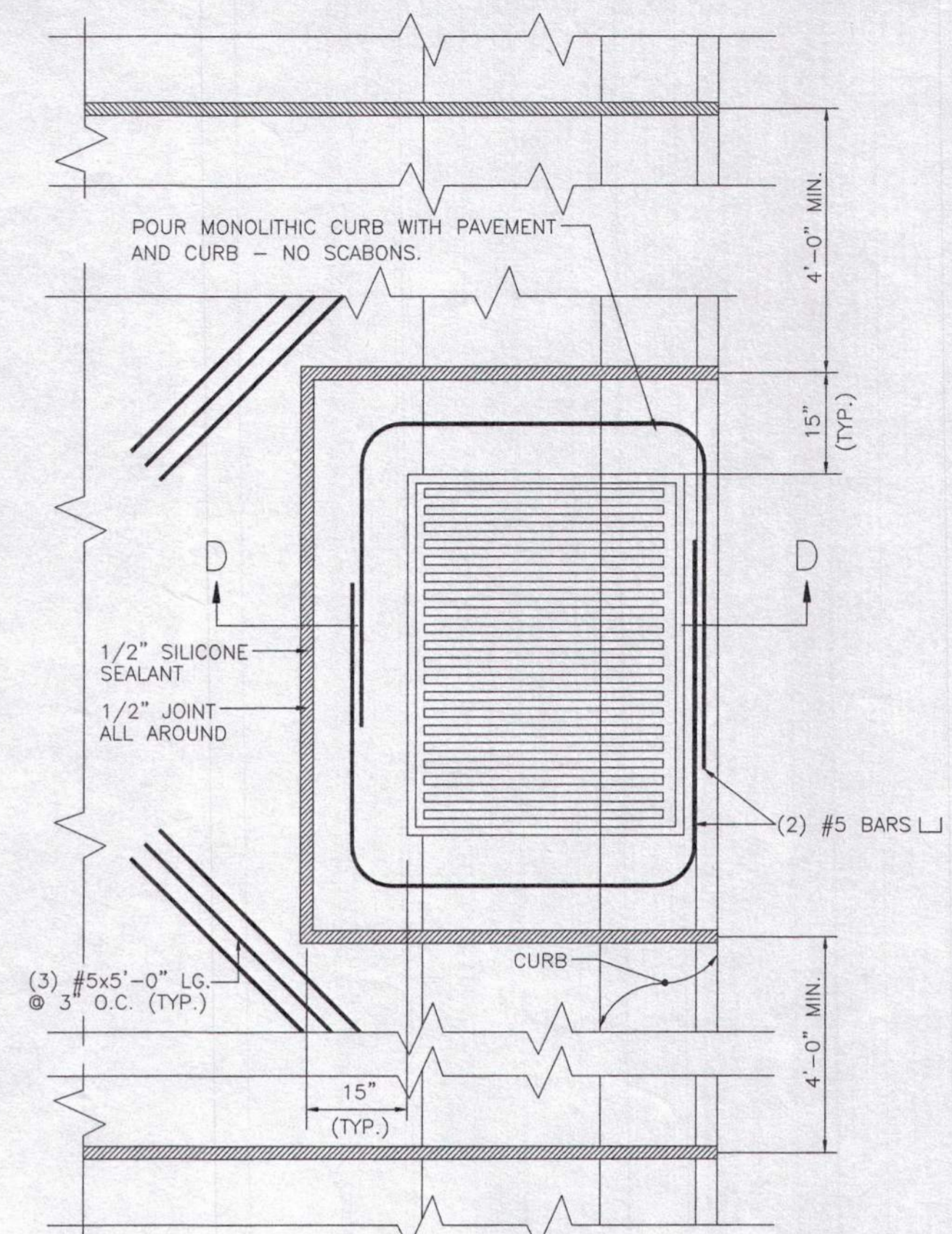
**MAN-HOLE CASE 1**  
N.T.S.



**MAN-HOLE CASE 2**  
N.T.S.



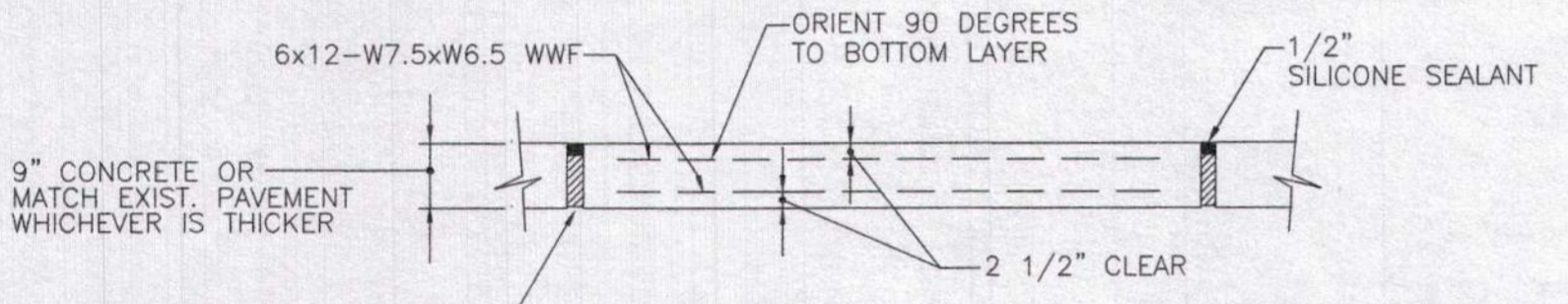
**ROLL-OVER CATCH BASIN PLACEMENT CASE 1**  
N.T.S.



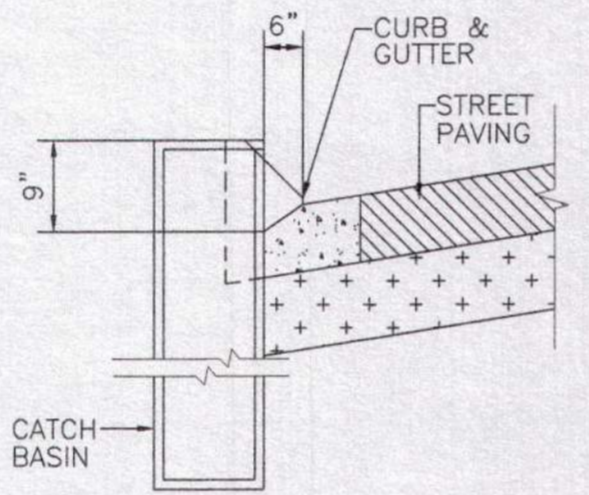
**ROLL-OVER CATCH BASIN PLACEMENT CASE 2**  
N.T.S.

\* ISOLATION PAD MUST HAVE A MINIMUM OF 4'-0" FROM ISOLATION PAD TO ROAD PANEL JOINT.

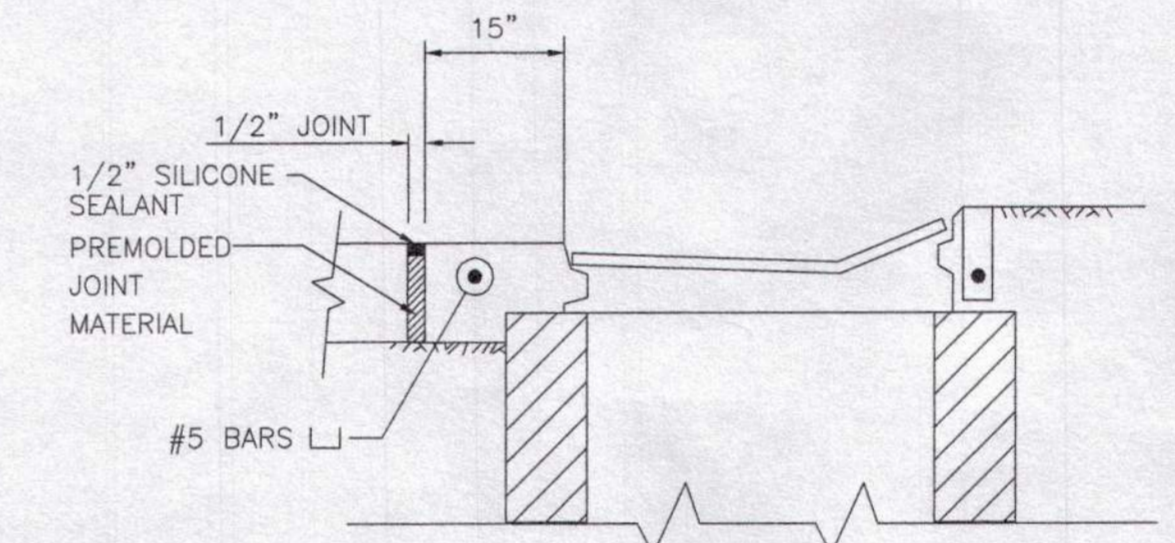
\*\* IF ISOLATION PAD FALLS LESS THAN 4'-0" FROM ROAD PANEL JOINT INCREASE ISOLATION PAD LENGTH AS REQUIRED TO COMBINE THE JOINTS



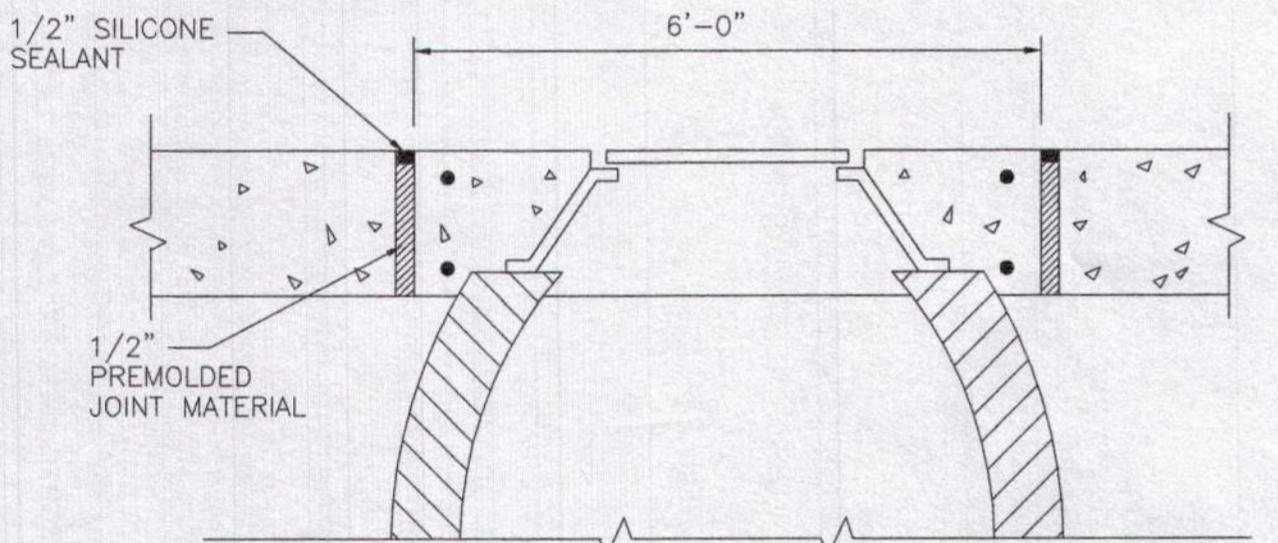
**SECTION F-F**  
N.T.S.



**SECTION C-C**  
N.T.S.

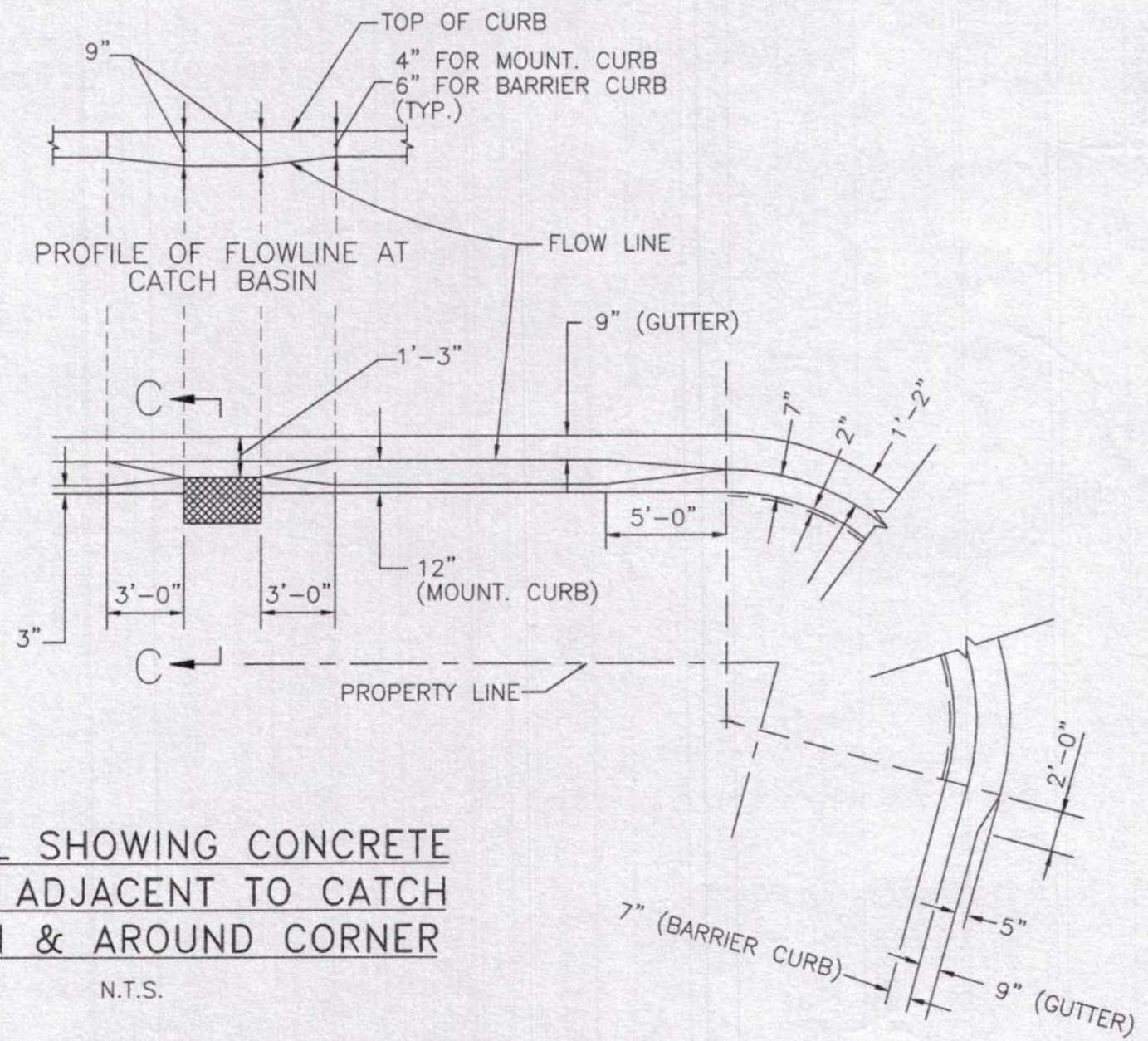


**SECTION D-D**  
**JOINT DETAIL AT ROLL-OVER BASIN**  
N.T.S.



**SECTION G-G**  
N.T.S.

**MANHOLE ISOLATION PAD**  
N.T.S.



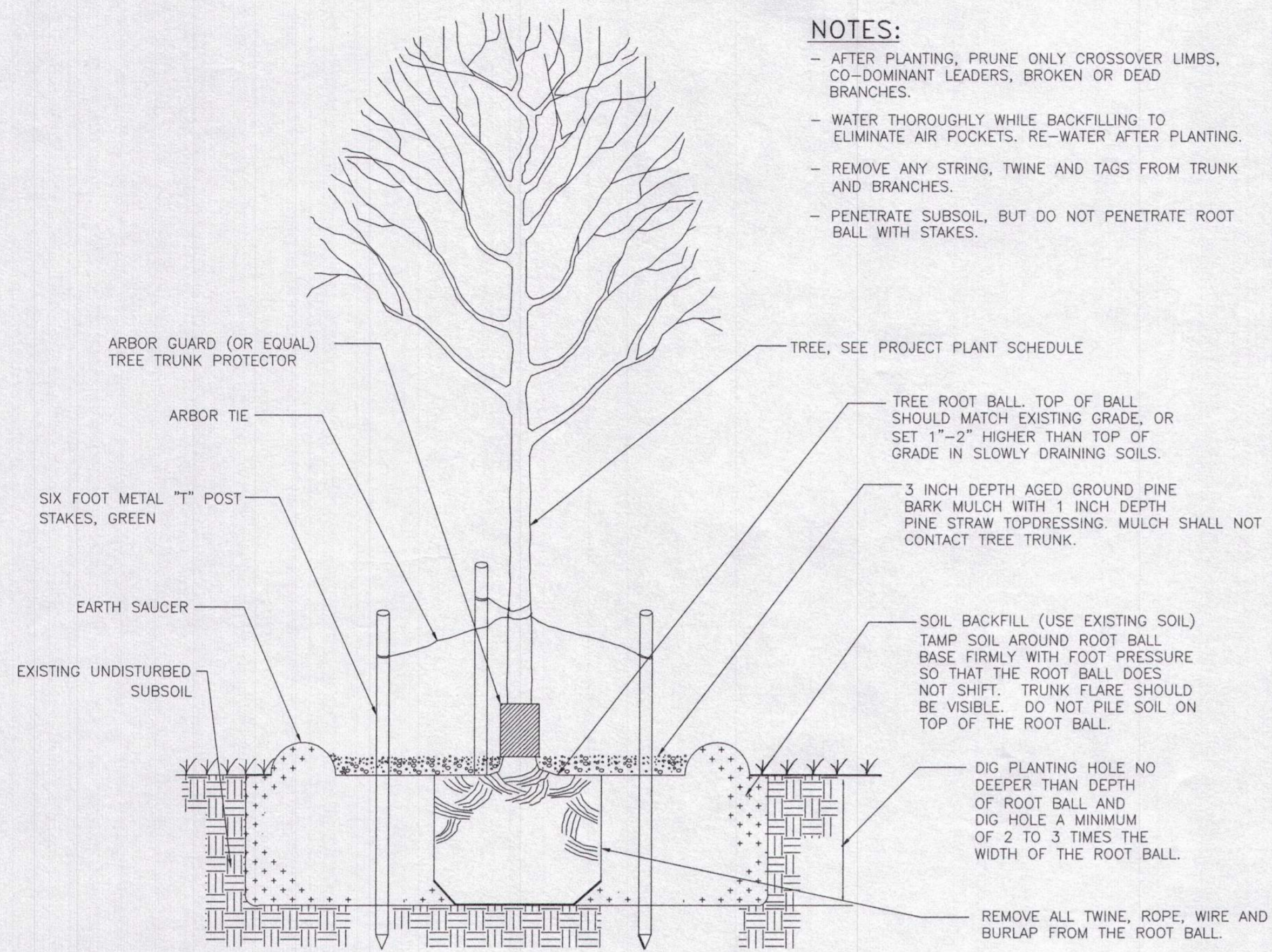
**DETAIL SHOWING CONCRETE CURB ADJACENT TO CATCH BASIN & AROUND CORNER**  
N.T.S.

NOTES:  
1.) EACH UTILITY STRUCTURE WITHIN THE ROADWAY SHALL HAVE IT'S ISOLATION PAD.

**ROLL-OVER CATCH BASIN PLACEMENT CASE 3**  
N.T.S.

	CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		
	MISCELLANEOUS DETAILS FOR CATCH BASIN, MANHOLE & UTILITIES INSTALLATION		
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DATE: 2/3/2015		SCALE: AS NOTED	APPROVED: MARK D. JERKICAN, DIRECTOR



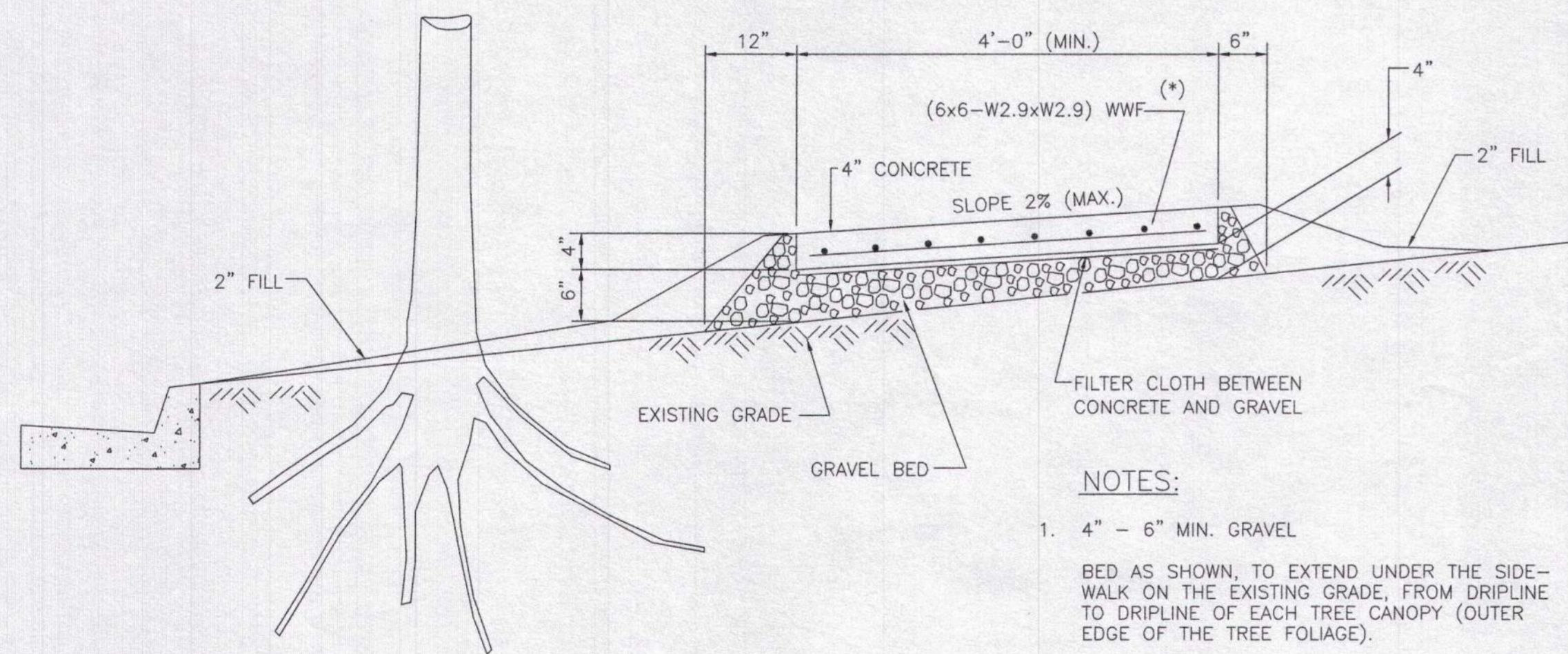


**NOTES:**

- AFTER PLANTING, PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, BROKEN OR DEAD BRANCHES.
- WATER THOROUGHLY WHILE BACKFILLING TO ELIMINATE AIR POCKETS. RE-WATER AFTER PLANTING.
- REMOVE ANY STRING, TWINE AND TAGS FROM TRUNK AND BRANCHES.
- PENETRATE SUBSOIL, BUT DO NOT PENETRATE ROOT BALL WITH STAKES.

**TREE PLANTING DETAIL**

N. T. S.



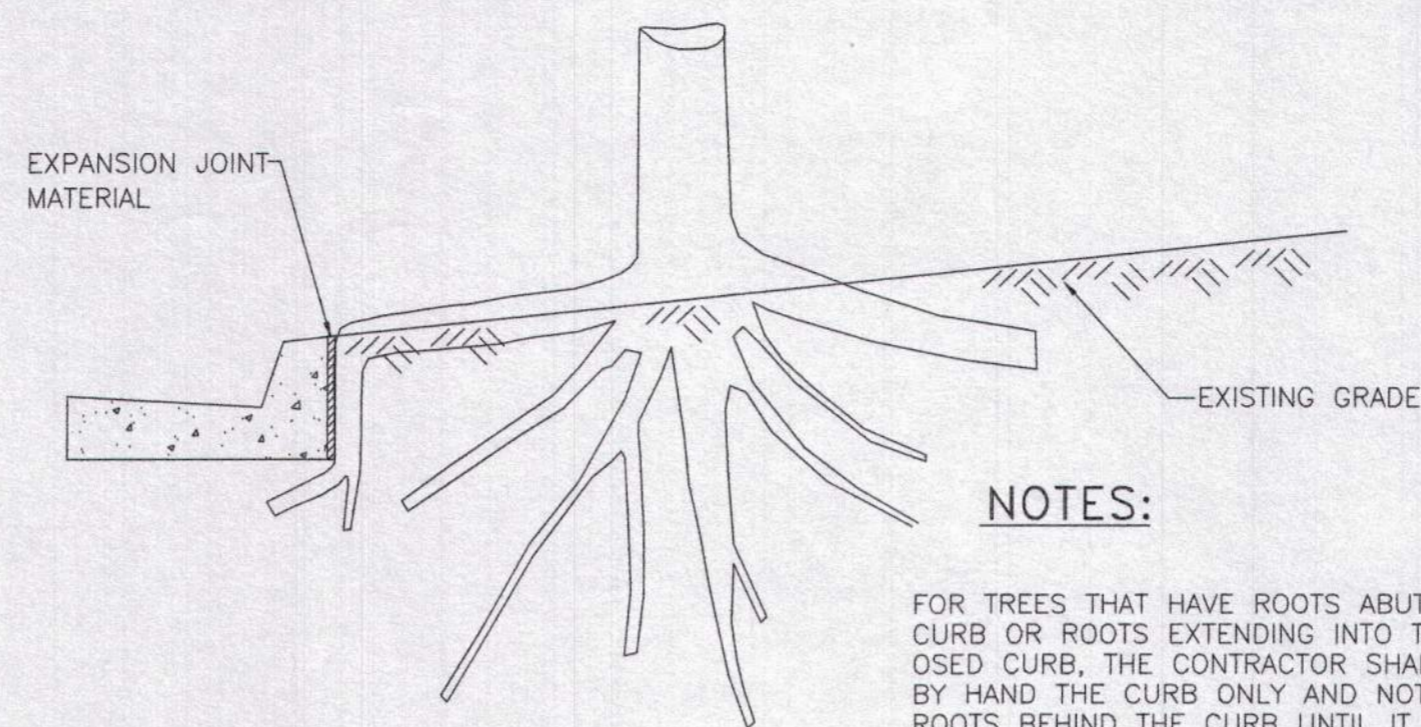
**SIDEWALK GRAVEL BED**

REQ'D. AT EACH TREE LOCATION

N. T. S.

**NOTES:**

1. 4" - 6" MIN. GRAVEL BED AS SHOWN, TO EXTEND UNDER THE SIDEWALK ON THE EXISTING GRADE, FROM DRIPLINE TO DRIPLINE OF EACH TREE CANOPY (OUTER EDGE OF THE TREE FOLIAGE).
  2. NO MORE THAN 1.5" - 2.0" OF FILL TO BE PLACED UNDER ANY TREE CANOPY.
  3. NO EXPANSION JOINTS TO BE PLACED OVER ROOTS. ONLY "WEAKENED PLANES" SHALL BE ALLOWED.
- (\* WITH 1.5" - 2.0" COVER



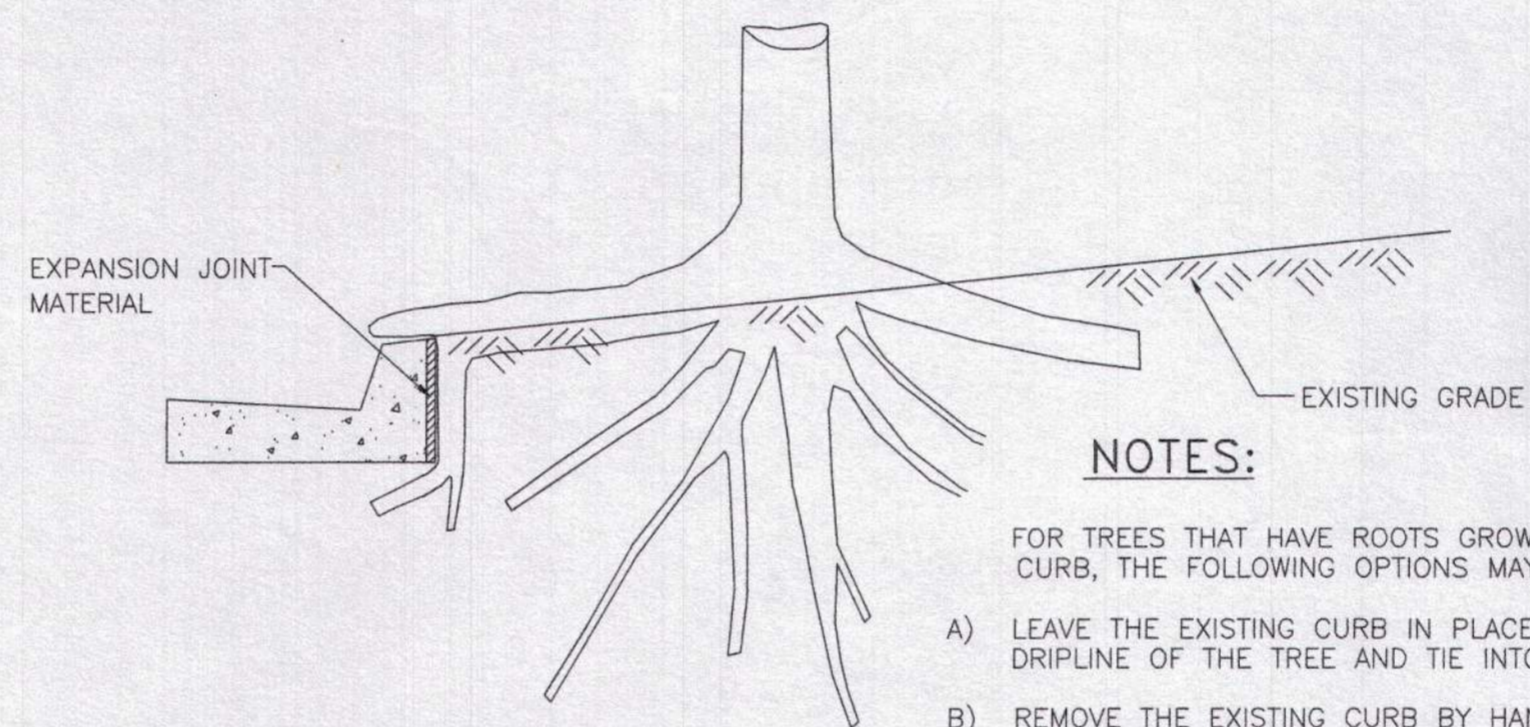
**NOTES:**

FOR TREES THAT HAVE ROOTS ABUTTING THE CURB OR ROOTS EXTENDING INTO THE PROPOSED CURB, THE CONTRACTOR SHALL REMOVE BY HAND THE CURB ONLY AND NOT DISTURB TREE ROOTS BEHIND THE CURB UNTIL IT IS DETERMINED (BY THE PARK AND PKWY. DEPARTMENT) HOW MUCH OF THE ROOTS CAN BE PRUNED. ONCE MARKED, THE ROOTS CAN BE PRUNED BY A LICENSED ARBORIST. ELIMINATE 12" OF ROADWAY BASE BEHIND NEW CURB WHERE ROOTS ARE ENCOUNTERING THE CURB. (SEE DETAIL "A")

**TYPICAL DIAGRAM NO. 1**

TREE ROOTS GROWING BEHIND EXISTING OR PROPOSED CURBS

N. T. S.



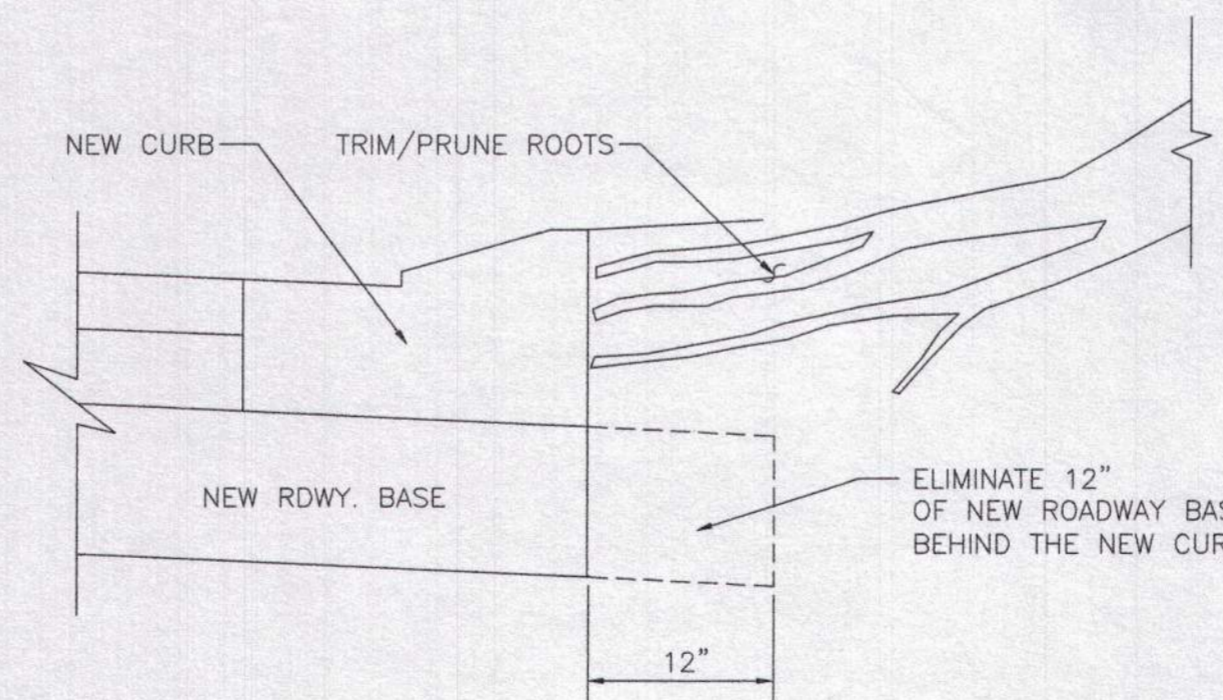
**NOTES:**

- FOR TREES THAT HAVE ROOTS GROWING OVER THE CURB, THE FOLLOWING OPTIONS MAY BE POSSIBLE:
- A) LEAVE THE EXISTING CURB IN PLACE UNDER THE DRIPLINE OF THE TREE AND TIE INTO THE NEW CURB.
  - B) REMOVE THE EXISTING CURB BY HAND AND FORM NEW CURB BY HAND AROUND TREE ROOTS WITHOUT ROOT PRUNING.
  - C) REMOVE THE EXISTING CURB BY HAND, PRUNE ROOTS AS MARKED BY THE DEPARTMENT OF PARKS & PARKWAYS. FORM AND POUR NEW CURB.

**TYPICAL DIAGRAM NO. 2**

TREE ROOTS GROWING OVER CURB

N. T. S.

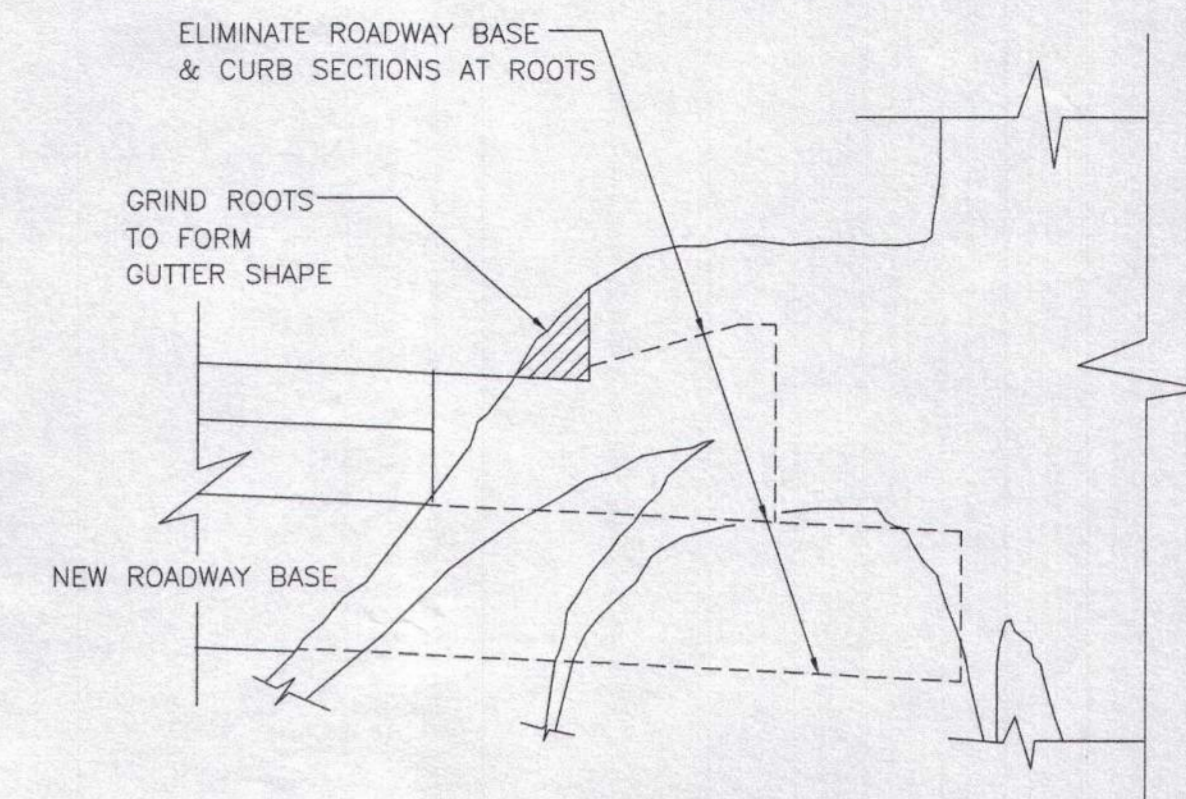


**DETAIL "A"**

DETAIL FOR ROOT PRUNING AT CURBS

REFER TO "TYPICAL DIAGRAM NO. 1"

N.T.S.



**NOTES:**

WHERE BIG ROOTS EXTEND INTO ROADWAY SECTION, ELIMINATE ROADWAY BASE AND CURB SECTIONS AT ROOTS, AND GRIND ROOTS TO FORM GUTTER SHAPE MATCHING ADJOINING CONCRETE GUTTERS AS PER DIRECTION OF THE DEPARTMENT OF PARKS & PARKWAYS

**TYPICAL DIAGRAM NO. 3**

TREE ROOTS EXTENDING INTO PROPOSED ROADWAY SECTION

N. T. S.

**GENERAL NOTES:**

- (1) THE CONTRACTOR IS RESPONSIBLE FOR HIRING A LICENSED ARBORIST TO PRUNE TREE ROOTS ON CITY TREES. ALL TREE ROOTS OF CITY OWNED TREES, DAMAGED DURING REMOVAL OF CURBS, SIDEWALKS AND DRIVEWAYS SHALL BE ROOT PRUNED. ALL TREE ROOTS DAMAGED DURING ANY EXCAVATION OPERATIONS, YARD DRAINS, COLLECTOR LINES, ETC. SHALL BE ROOT PRUNED.
- (2) ALL PROJECTS REQUIRE ON-SITE INSPECTION BY THE DEPARTMENT OF PARKS & PARKWAYS AND THE ARBORIST TO DETERMINE THE EXTENT OF ROOT PRUNING THAT WILL BE REQUIRED OR ALLOWED.
- (3) FERTILIZATION - ONLY IF SPECIFIED BY DEPARTMENT OF PARKS & PARKWAYS ARBORIST, THE TREE ROOTS PRUNED DUE TO CONSTRUCTION SHALL BE FERTILIZED USING A WATER SOLUBLE FERTILIZER INJECTED INTO THE SOIL. THE MINIMUM ACCEPTABLE N-P-K RATIO SHALL BE 30-5-5. THE NUTRIENT COMPLEX AND RATIO (GAL/SQ. FT.) MUST BE APPROVED BY THE URBAN FORESTER OVERSEEING THE PROJECT.
- (4) ONLY IF SPECIFIED BY THE DEPARTMENT OF PARKS & PARKWAYS, MYCOORHIZAL FUNGAL INOCULANT TREATMENT SHALL BE APPLIED TO CONSTRUCTION DAMAGED TREE ROOT ZONES AS APPROVED BY THE URBAN FORESTER FROM THE PARK AND PARKWAYS DEPARTMENT.
- (5) TERMITE TREATMENT - ALL TREE ROOTS PRUNED DUE TO CONSTRUCTION SHALL BE TREATED FOR TERMITES WITH A TERMITICIDE APPROVED BY THE URBAN FORESTER.
- (6) ALL TREES SHALL BE IRRIGATED AND MULCHED AS INDICATED IN THE SECTION 02480, "LANDSCAPE PROTECTION DURING CONSTRUCTION".
- (7) ONLY IF SPECIFIED BY THE DEPARTMENT OF PARKS & PARKWAYS, CAMBISTAT GROWTH REGULATOR OR EQUIVALENT SHALL BE APPLIED TO THE TREES AS PER THE DIRECTION OF THE URBAN FORESTER OVERSEEING THE PROJECT.



CITY OF NEW ORLEANS  
DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION



MISCELLANEOUS DETAILS FOR  
TREE PLANTING & ROOT PRUNING

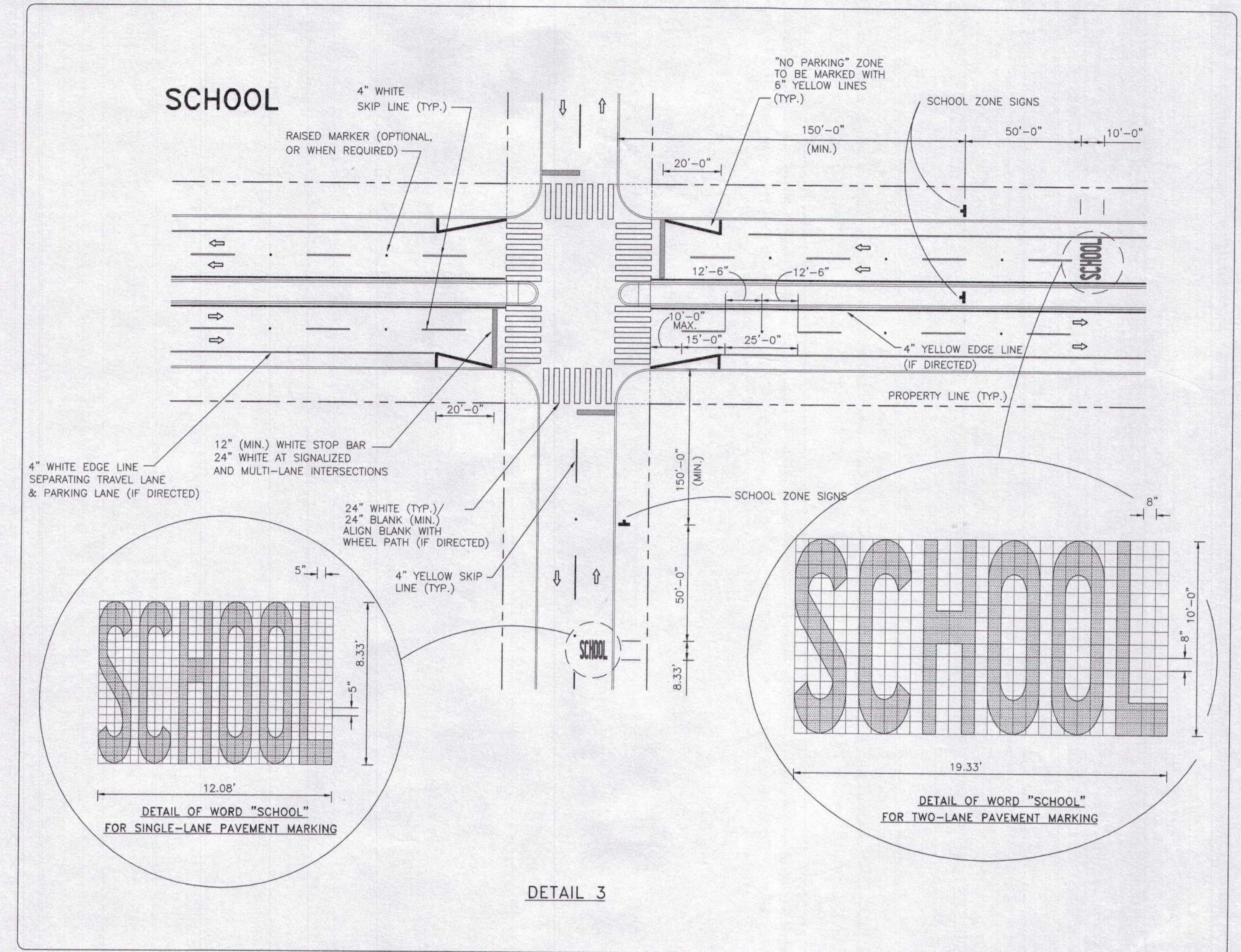
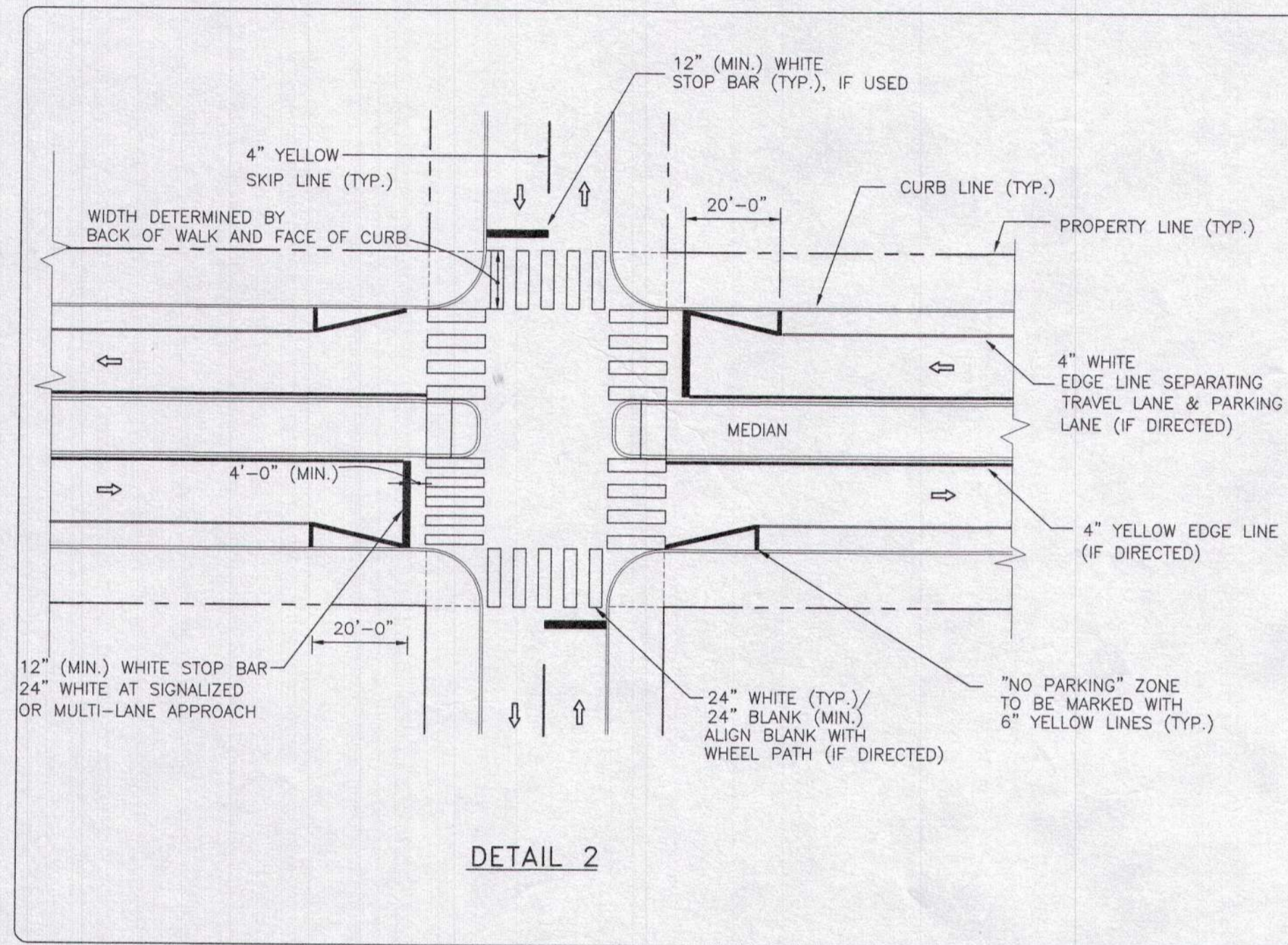
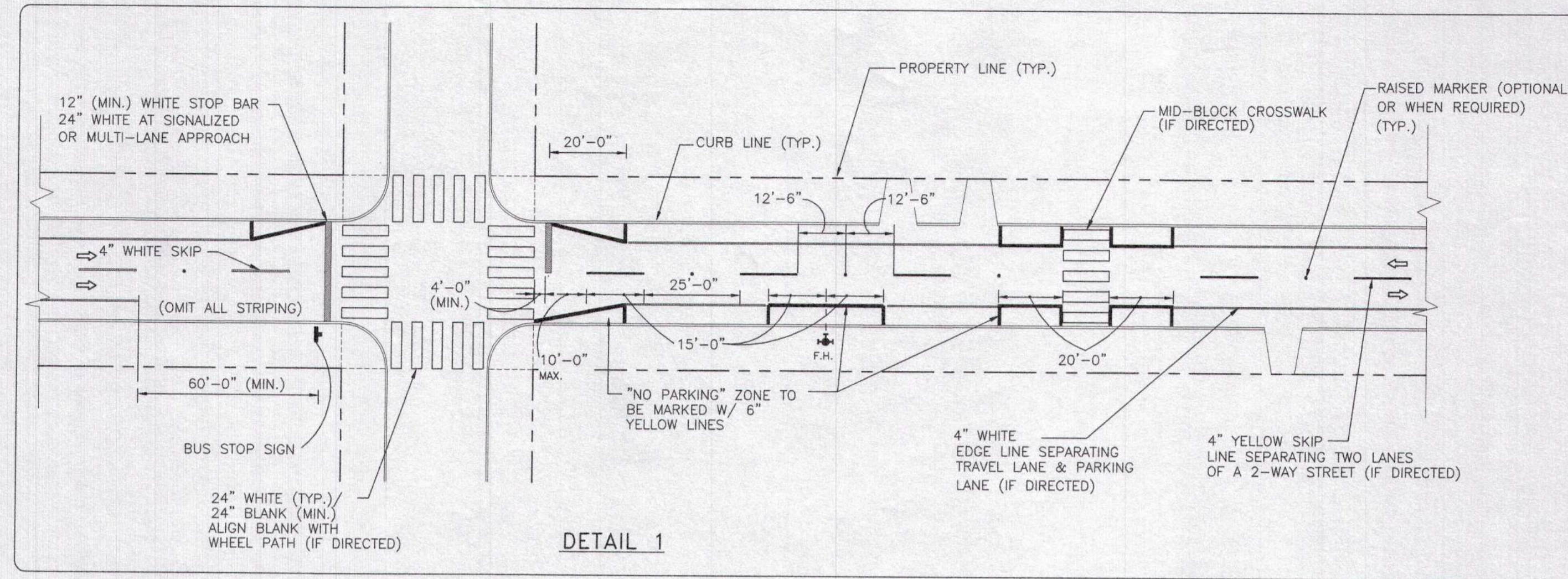
DRAWING No.

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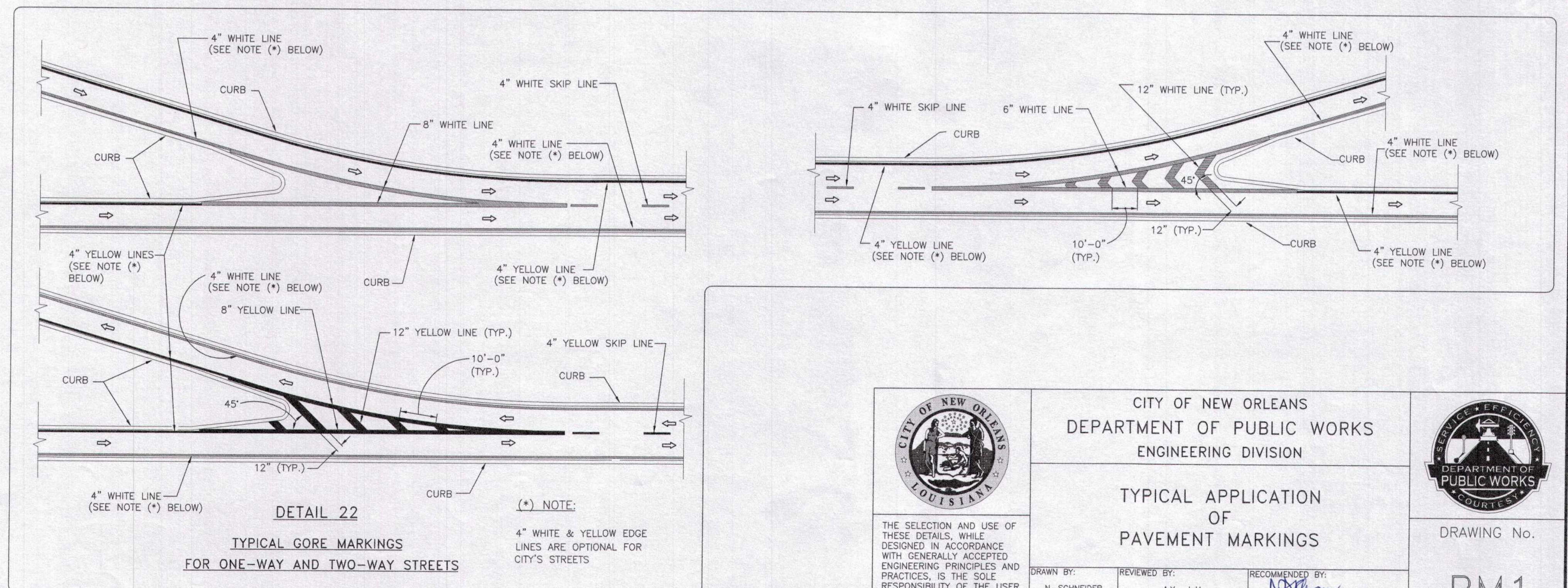
DRAWN BY: N. SCHNEIDER	REVIEWED BY: M.T. B.V. R.S. B.J. A.Y.	RECOMMENDED BY: <i>Nguyen</i> NGUYEN D. PHAN, CHIEF ENGINEER
DATE: 2/3/2015	SCALE: AS NOTED	APPROVED: <i>Mark D. Jernigan</i> MARK D. JERNIGAN, DIRECTOR

MC3





DESCRIPTION	COLOR	WIDTH	APPLICATION
SINGLE BROKEN	WHITE	4"	SEPARATION OF TRAVEL LANES IN THE SAME DIRECTION; INDICATE THAT IT IS PERMISSIBLE TO CROSS THE LINE TO CHANGE LANES; i. e., LANE LINES ON MULTILANE ROADWAYS.
	YELLOW	4"	SEPARATION OF TRAVEL LANES IN OPPOSITE DIRECTIONS; INDICATE THAT PASSING IS ALLOWED IN BOTH DIRECTIONS; i. e., CENTERLINE ON TWO LANE, TWO WAY ROADWAYS.
SINGLE SOLID	WHITE	4"	SEPARATION OF TRAVEL LANES OR SEPARATION OF TRAVEL LANE AND SHOULDER; INDICATE THAT CROSSING THE LINE IS DISCOURAGED; i. e., LANE LINES AT INTERSECTION APPROACHES OR RIGHT EDGE LINES.
		6"	SEPARATION OF A MOTOR VEHICLE TRAVEL LANE FROM A BIKE TRAVEL LANE.
	8"	DELINEATION OF LOCATION WHICH INDICATES CROSSING IS STRONGLY DISCOURAGED; i. e., SEPARATION OF TURN LANES FROM THROUGH LANES OR GORE AREAS AT RAMP TERMINALS.	
DOUBLE SOLID	YELLOW	4"	DELINEATION OF LEFT EDGE LINES ON DIVIDED ROADWAYS, ONE-WAY ROADS AND RAMPS.
	WHITE	4"-4"-4"	SEPARATION OF TRAVEL LANES IN THE SAME DIRECTION; INDICATE THAT IT IS PROHIBITED TO CROSS THE LINES; e. g., PROHIBIT LANE CHANGES ON THE APPROACH TO AN OBSTRUCTION IN THE ROADWAY BETWEEN TWO LANES IN THE SAME DIRECTION
DOUBLE BROKEN	YELLOW	4"-4"-4"	SEPARATION OF TRAVEL LANES IN OPPOSITE DIRECTIONS, WHICH INDICATE THAT PASSING IS NOT ALLOWED IN EITHER DIRECTION. LEFT TURN MANEUVERS ACROSS THIS MARKING ARE PERMITTED. ALSO USED IN ADVANCE OF OBSTRUCTIONS WHICH MAY BE PASSED ONLY ON THE RIGHT SIDE.
	YELLOW	4"-2"-4"	SEPARATION OF TRAVEL LANES IN OPPOSITE DIRECTIONS; INDICATE THAT PASSING IS ALLOWED FOR VEHICLES ADJACENT TO THE BROKEN LINE, BUT PROHIBITED FOR VEHICLES ADJACENT TO SOLID LINE. USED ON TWO-WAY ROADWAYS WITH TWO OR THREE LANES. ALSO USED TO DELINEATE EDGES OF A TWO-WAY LEFT TURN LANES (SOLID ON THE OUTSIDE, BROKEN LINES ON THE INSIDE).
SINGLE DOTTED	WHITE	4"	AN EXTENSION OF A LANE LINE OR CENTERLINE THROUGH AN INTERSECTION OR A CURVED DOTTED LINE THROUGH AN INTERSECTION TO HELP GUIDE TURNING VEHICLES AS THEY MOVE THROUGH THEIR TURN. MAY EXTEND AN EDGE LINE, ESPECIALLY WHERE THE ROAD WIDENS FOR AN ADDED LANE FOR DECELERATION OR FOR TURNING.
	WHITE	8"	SEPARATION OF THROUGH LANE AND AUXILIARY LANE OR DROPPED LANE.
TRANSVERSE	WHITE	6"	CROSSWALK EDGE LINES AT MINOR INTERSECTIONS, IF DIRECTED
		12"	STOP BARS AT MINOR INTERSECTIONS CROSSWALK EDGE LINES AT MAJOR INTERSECTIONS, IF DIRECTED
	WHITE	24"	STOP BARS AT MAJOR INTERSECTIONS HIGH-VISIBILITY, LONGITUDINAL CROSSWALK STRIPING
DIAGONAL	WHITE	12"	CROSSHATCH MARKINGS, PLACED AT AN ANGLE OF 45° AT VARYING DISTANCES APART, ON SHOULDERS OR CHANNELIZATION ISLANDS TO ADD EMPHASIS TO THESE ROADWAY FEATURES.



CITY OF NEW ORLEANS  
LOUISIANA

CITY OF NEW ORLEANS  
DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS  
COURTESY

**TYPICAL APPLICATION OF PAVEMENT MARKINGS**

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DRAWN BY: N. SCHNEIDER  
REVIEWED BY: A.Y. L.H.  
DATE: 2/3/2015  
SCALE: AS NOTED

RECOMMENDED BY: NGUYEN B. PHAN, CHIEF ENGINEER  
APPROVED: MARK B. JERNIGAN, DIRECTOR

DRAWING No. **PM1**



**SECTION 01 410**  
**SWB STANDARD DRAWINGS**

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**Sewerage and Water Board  
of  
New Orleans**

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**Standard Drawings**



*Revised October 25, 2018*



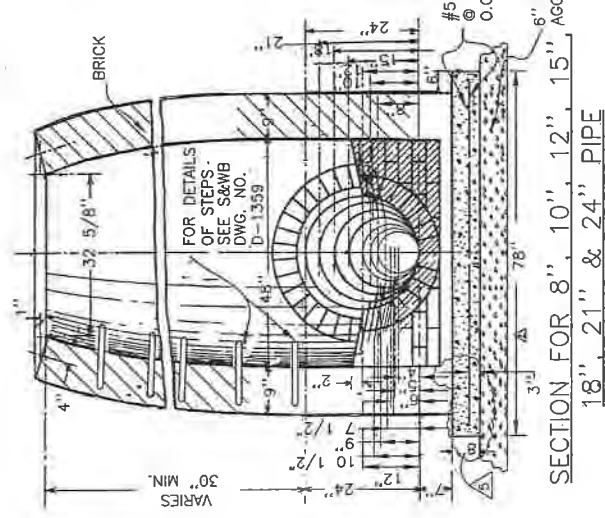
## INDEX OF STANDARD DRAWINGS

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2. D-871 General plan of drain manhole frame & cover
3. D-873 Detail of standard single vertical catch basin #1, 2 & 3
4. D-873A Detail of standard double vertical catch basin
5. D-1359 Detail of steps for concrete & brick manholes
6. 2445-F-2 Rectangular frame and cover for meter or valve
7. 3143-E-1 Detail of sewer and water manhole castings
8. D-3264 Detail of standard 24"x 30" clear opening drop inlet catch basin
9. D-3340 Detail of standard manhole for circular pipe larger than 36"
10. D-3431-A Detail of standard single mountable catch basin
11. D-3431-B Detail of standard double mountable catch basin
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13. D-3810 Typical sections of concrete pipe bedding from 48" to 72" pipe
14. D-3933 Typical sections of reinforced concrete arch pipe bedding from 22"x13 1/2" to 65"x 40"
15. D-3934 Typical sections of reinforced concrete arch pipe bedding from 73"x 45" to 122"x 78"
16. D-3937 Detail of standard manholes for large concrete arch pipe
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18. 6178-B-6 Typical sewer brick manhole and drop manhole
19. 6178-B-6A Typical pre-cast concrete manhole
20. 6179-F-2 Hydrant setting, details of valve box and cover, and valve manhole

21. 6312-E5-A Typical sewer service connection for sewer main less than or equal to 8" deep
22. 6312-E5-B Typical sewer service connection for sewer main greater than 8' deep
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24. 7005-W Pressure test connection on new water mains (18" and larger), flushing and chlorination
25. 7134A-W Typical water service connection
26. 7134-W Water meter service connection for 5/8" and 1" fixed meter box
27. 7165-D Special fabricated steel cover for canal cleanout manhole
28. 7332-W 2" & 1 1/2" meter service connection
29. 8178-SD Typical sewer and drain siphon detail & pipe/wall connections
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32. 8319-D Single combination catch basin – manhole structure
33. 8353-W1 Above ground assembly-fire and domestic
34. 8353-W2 Above ground assembly-fire only
35. 8353-W3 Above ground assembly-domestic only

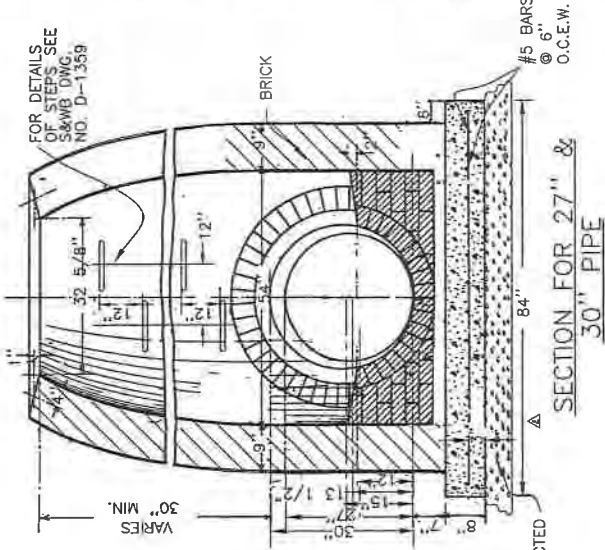


NO.1 M.H.



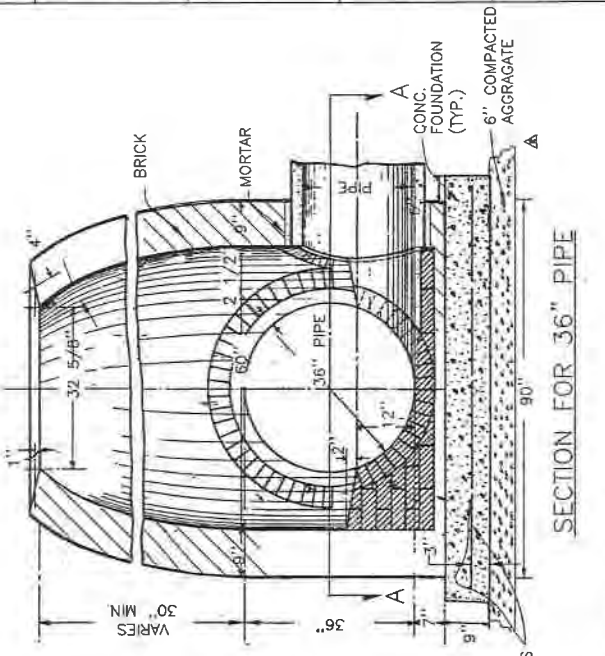
SECTION FOR 8", 10", 12", 15", 18", 21" & 24" PIPE

NO.2 M.H.

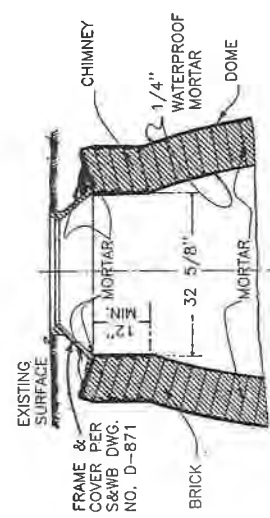


SECTION FOR 27" & 30" PIPE

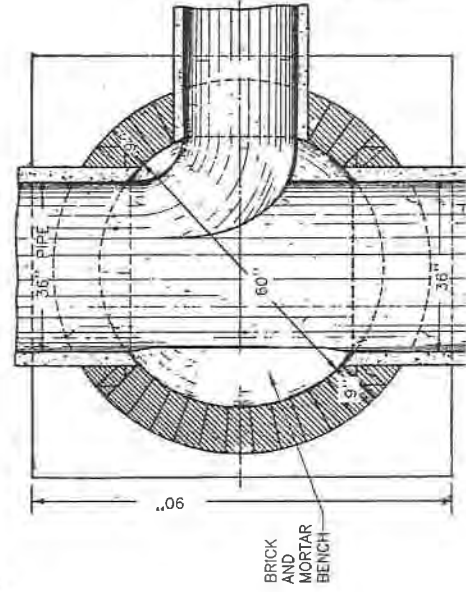
NO.3 M.H.



SECTION FOR 36" PIPE



TYPICAL UPPER MANHOLE SECTION



SECTION A-A

NO.3 M.H. - AS SHOWN  
NO.1 & 2 M.H. - SIMILAR

NOTES:

1. ALL MANHOLES, FRAMES AND COVERS SHALL BE AS SHOWN ON S&WB DWG. NO. D-871, GENERAL PLAN OF MANHOLE FRAME AND COVER.
2. INSIDE & OUTSIDE BRICK WALLS, BENCHES, & INVERTS TO BE MORTARED WITH WATERPROOFING COMPOUND FOR THICKNESS OF 1/4" IN ACCORDANCE WITH SPECIFICATIONS.
3. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.
4. SEE S&WB DWG. NO. 6178-B-6 FOR PRE-CAST MANHOLES

SCALE: N.T.S.

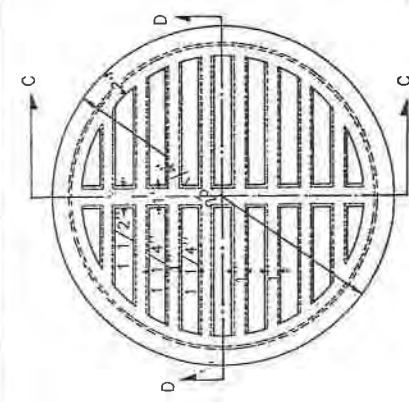
NO. 1	DATE	REVISION	BY
1			
2			
3			
4			
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6			
7			
8			
9			
10			

SEWERAGE AND WATER BOARD  
OF NEW ORLEANS

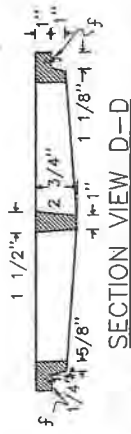
GENERAL SECTION OF STANDARD  
DRAIN BRICK MANHOLE

DATE: 10/15/1910

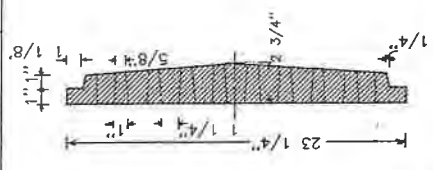
DWG. NO. D-870



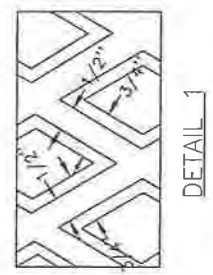
TOP VIEW OF OPEN GRATE MANHOLE COVER



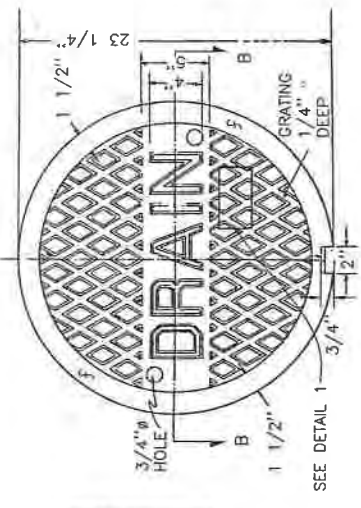
SECTION VIEW D-D



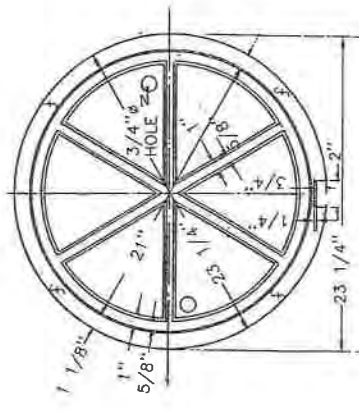
SECTION VIEW C-C



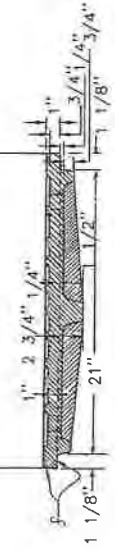
DETAIL 1



TOP VIEW OF MANHOLE COVER



BOTTOM VIEW OF MANHOLE COVER

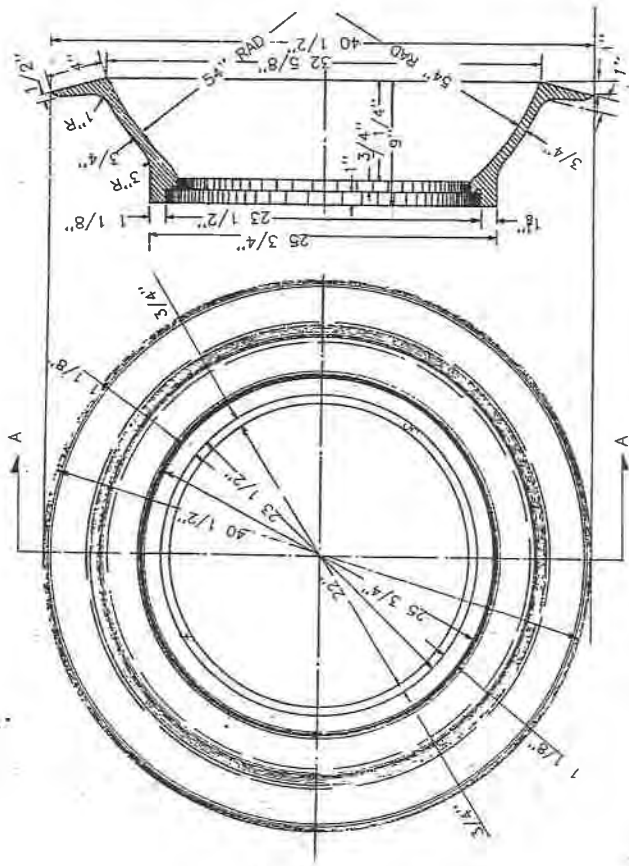


SECTION VIEW B-B

SCALE: N.T.S.

NOTES:

1. f = MACHINED SURFACE.
2. FRAME & COVER SHALL CONFORM TO EAST JORDAN IRON WORK, INC. V-1501 FRAME & COVER OR APPROVED EQUAL.



SECTION VIEW A-A

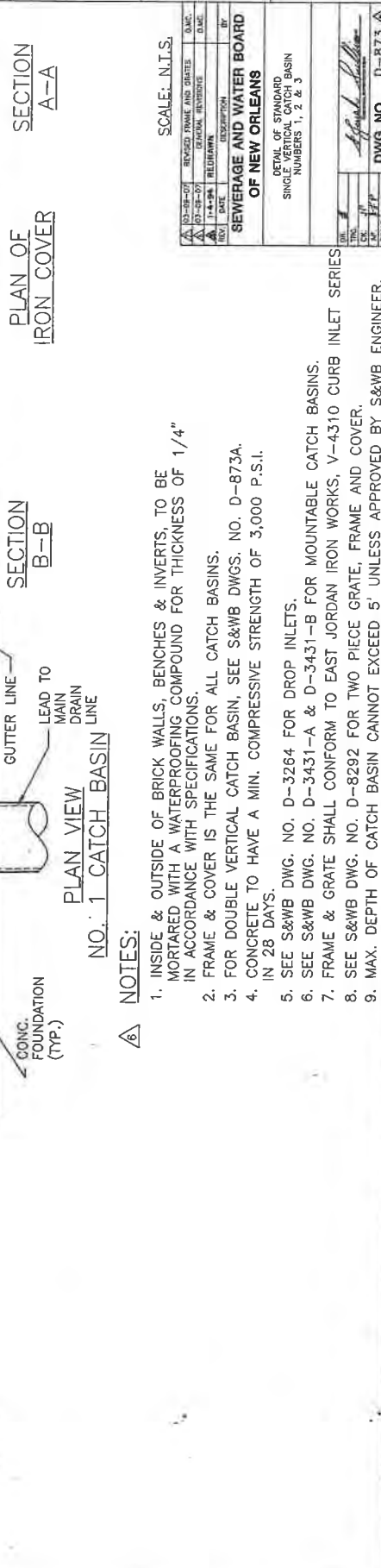
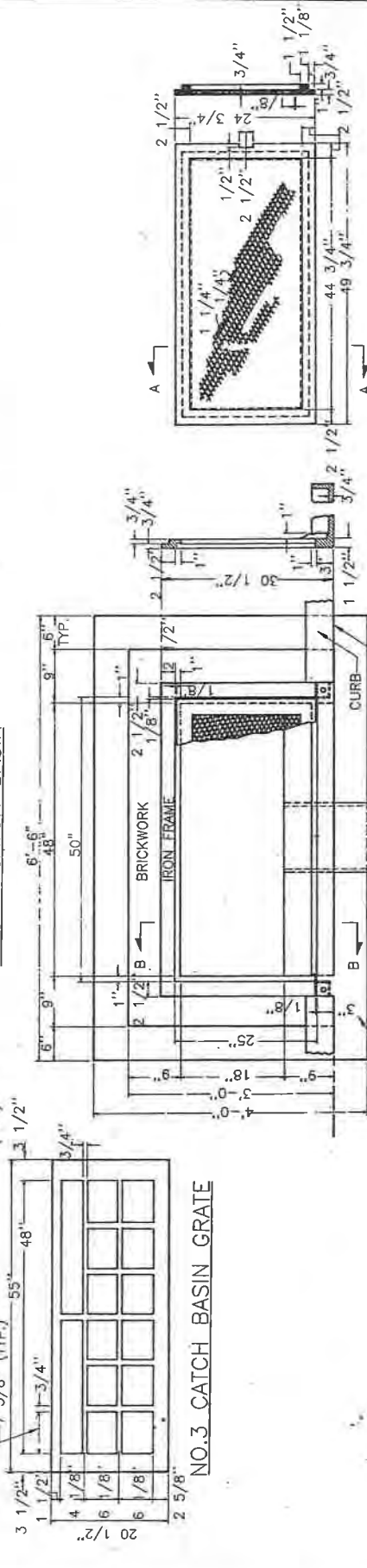
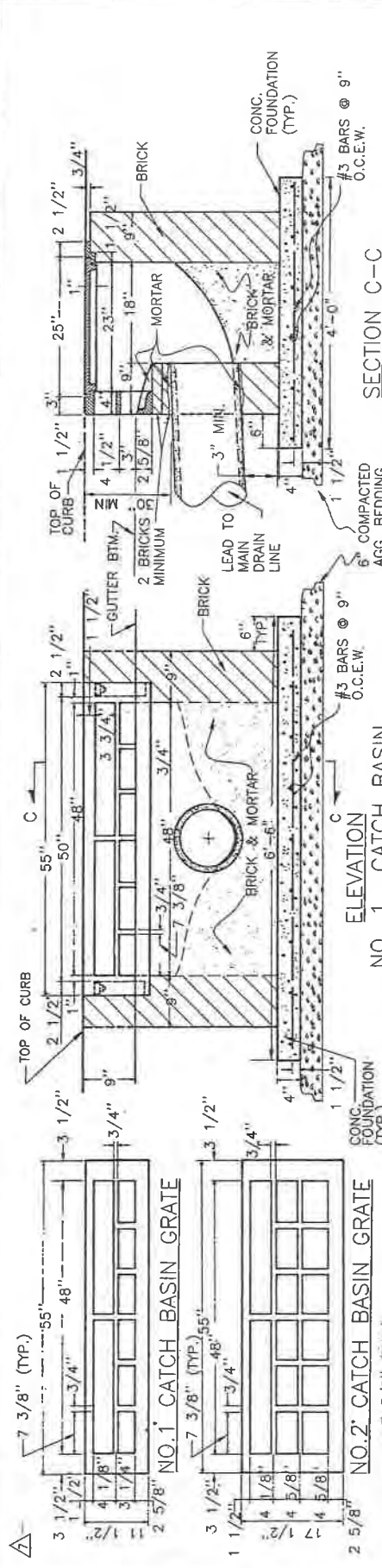
TOP VIEW OF MANHOLE FRAME

NO.	DATE	BY	DESCRIPTION
1	10/15/01	J. B. S.	DESIGN
2	11/15/01	J. B. S.	REVISED
3	12/15/01	J. B. S.	REVISED
4	1/15/02	J. B. S.	REVISED
5	2/15/02	J. B. S.	REVISED
6	3/15/02	J. B. S.	REVISED
7	4/15/02	J. B. S.	REVISED
8	5/15/02	J. B. S.	REVISED
9	6/15/02	J. B. S.	REVISED
10	7/15/02	J. B. S.	REVISED
11	8/15/02	J. B. S.	REVISED
12	9/15/02	J. B. S.	REVISED
13	10/15/02	J. B. S.	REVISED
14	11/15/02	J. B. S.	REVISED
15	12/15/02	J. B. S.	REVISED
16	1/15/03	J. B. S.	REVISED
17	2/15/03	J. B. S.	REVISED
18	3/15/03	J. B. S.	REVISED
19	4/15/03	J. B. S.	REVISED
20	5/15/03	J. B. S.	REVISED
21	6/15/03	J. B. S.	REVISED
22	7/15/03	J. B. S.	REVISED
23	8/15/03	J. B. S.	REVISED
24	9/15/03	J. B. S.	REVISED
25	10/15/03	J. B. S.	REVISED
26	11/15/03	J. B. S.	REVISED
27	12/15/03	J. B. S.	REVISED
28	1/15/04	J. B. S.	REVISED
29	2/15/04	J. B. S.	REVISED
30	3/15/04	J. B. S.	REVISED
31	4/15/04	J. B. S.	REVISED
32	5/15/04	J. B. S.	REVISED
33	6/15/04	J. B. S.	REVISED
34	7/15/04	J. B. S.	REVISED
35	8/15/04	J. B. S.	REVISED
36	9/15/04	J. B. S.	REVISED
37	10/15/04	J. B. S.	REVISED
38	11/15/04	J. B. S.	REVISED
39	12/15/04	J. B. S.	REVISED
40	1/15/05	J. B. S.	REVISED
41	2/15/05	J. B. S.	REVISED
42	3/15/05	J. B. S.	REVISED
43	4/15/05	J. B. S.	REVISED
44	5/15/05	J. B. S.	REVISED
45	6/15/05	J. B. S.	REVISED
46	7/15/05	J. B. S.	REVISED
47	8/15/05	J. B. S.	REVISED
48	9/15/05	J. B. S.	REVISED
49	10/15/05	J. B. S.	REVISED
50	11/15/05	J. B. S.	REVISED
51	12/15/05	J. B. S.	REVISED
52	1/15/06	J. B. S.	REVISED
53	2/15/06	J. B. S.	REVISED
54	3/15/06	J. B. S.	REVISED
55	4/15/06	J. B. S.	REVISED
56	5/15/06	J. B. S.	REVISED
57	6/15/06	J. B. S.	REVISED
58	7/15/06	J. B. S.	REVISED
59	8/15/06	J. B. S.	REVISED
60	9/15/06	J. B. S.	REVISED
61	10/15/06	J. B. S.	REVISED
62	11/15/06	J. B. S.	REVISED
63	12/15/06	J. B. S.	REVISED
64	1/15/07	J. B. S.	REVISED
65	2/15/07	J. B. S.	REVISED
66	3/15/07	J. B. S.	REVISED
67	4/15/07	J. B. S.	REVISED
68	5/15/07	J. B. S.	REVISED
69	6/15/07	J. B. S.	REVISED
70	7/15/07	J. B. S.	REVISED
71	8/15/07	J. B. S.	REVISED
72	9/15/07	J. B. S.	REVISED
73	10/15/07	J. B. S.	REVISED
74	11/15/07	J. B. S.	REVISED
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76	1/15/08	J. B. S.	REVISED
77	2/15/08	J. B. S.	REVISED
78	3/15/08	J. B. S.	REVISED
79	4/15/08	J. B. S.	REVISED
80	5/15/08	J. B. S.	REVISED
81	6/15/08	J. B. S.	REVISED
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83	8/15/08	J. B. S.	REVISED
84	9/15/08	J. B. S.	REVISED
85	10/15/08	J. B. S.	REVISED
86	11/15/08	J. B. S.	REVISED
87	12/15/08	J. B. S.	REVISED
88	1/15/09	J. B. S.	REVISED
89	2/15/09	J. B. S.	REVISED
90	3/15/09	J. B. S.	REVISED
91	4/15/09	J. B. S.	REVISED
92	5/15/09	J. B. S.	REVISED
93	6/15/09	J. B. S.	REVISED
94	7/15/09	J. B. S.	REVISED
95	8/15/09	J. B. S.	REVISED
96	9/15/09	J. B. S.	REVISED
97	10/15/09	J. B. S.	REVISED
98	11/15/09	J. B. S.	REVISED
99	12/15/09	J. B. S.	REVISED
100	1/15/10	J. B. S.	REVISED

SEWERAGE AND WATER BOARD  
 GENERAL PLAN  
 OF DRAIN  
 MANHOLE FRAME & COVER

DWG. NO. D-871





- NOTES:**
1. INSIDE & OUTSIDE OF BRICK WALLS, BENCHES & INVERTS, TO BE MORTARED WITH A WATERPROOFING COMPOUND FOR THICKNESS OF 1/4" IN ACCORDANCE WITH SPECIFICATIONS.
  2. FRAME & COVER IS THE SAME FOR ALL CATCH BASINS.
  3. FOR DOUBLE VERTICAL CATCH BASIN, SEE S&WB DWGS. NO. D-873A.
  4. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.
  5. SEE S&WB DWG. NO. D-3264 FOR DROP INLETS.
  6. SEE S&WB DWG. NO. D-3431-A & D-3431-B FOR MOUNTABLE CATCH BASINS.
  7. FRAME & GRATE SHALL CONFORM TO EAST JORDAN IRON WORKS, V-4310 CURB INLET SERIES.
  8. SEE S&WB DWG. NO. D-8292 FOR TWO PIECE GRATE, FRAME AND COVER.
  9. MAX. DEPTH OF CATCH BASIN CANNOT EXCEED 5' UNLESS APPROVED BY S&WB ENGINEER.

SCALE: N.T.S.

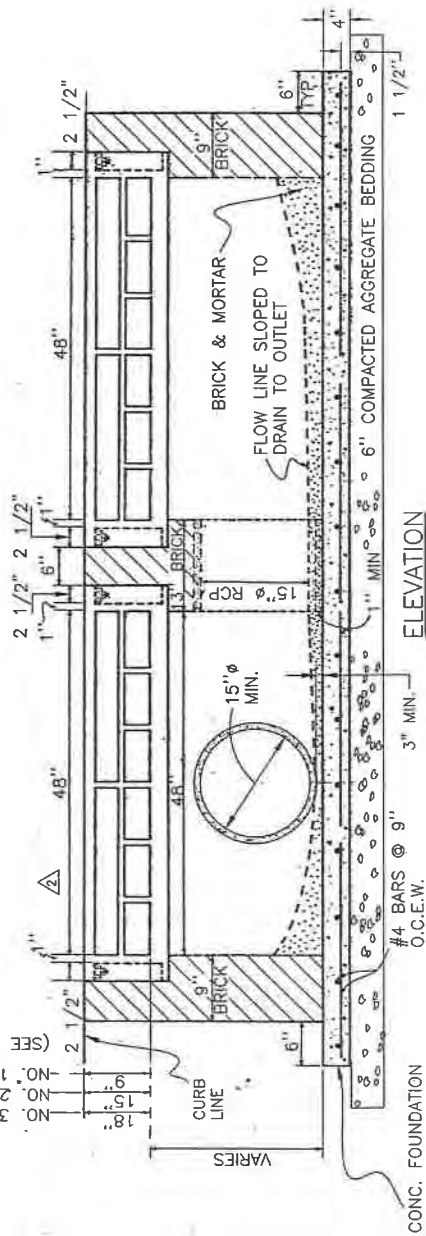
NO.	REVISION	DATE	BY	CHKD.	APP'D.
1	AS SHOWN				

**SEWERAGE AND WATER BOARD**  
OF NEW ORLEANS

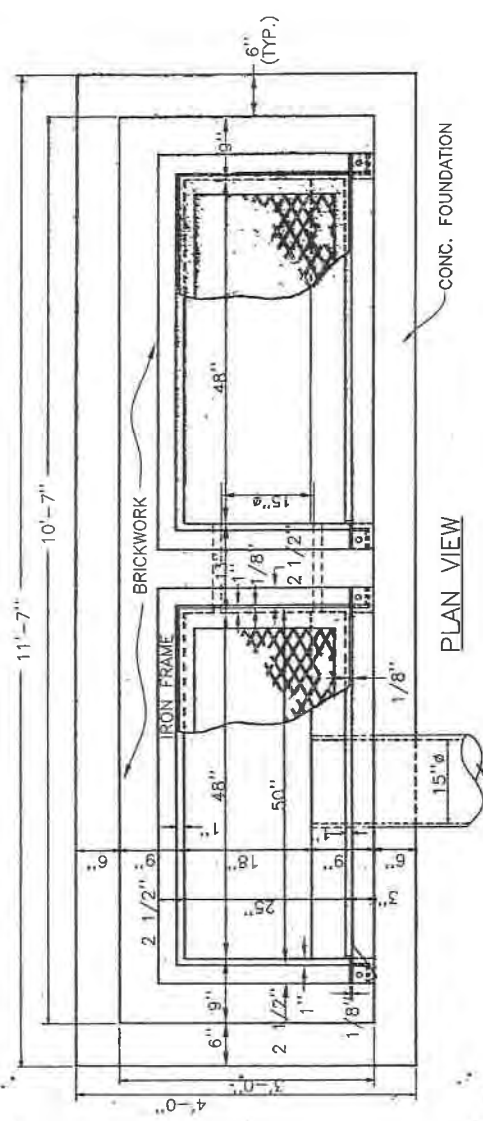
DETAIL OF STANDARD  
SINGLE VERTICAL CATCH BASIN  
NUMBERS 1, 2 & 3

DWG. NO. D-873

(SEE DWG. D-873)  
 NO. 3 CATCH BASIN  
 NO. 2 CATCH BASIN  
 NO. 1 CATCH BASIN



ELEVATION  
 (SEE NOTE NO. 1)



PLAN VIEW

THIS LEAD SHALL BE CONNECTED TO MAIN DRAIN. THE LEAD CAN BE INSTALLED ON EITHER SIDE OF THE CATCH BASIN. THE BOTTOM OF CATCH BASIN MUST BE SLOPED TO DRAIN TOWARDS LEAD. CATCH BASIN LEAD MAY BE POSITIONED AT AN ANGLE AS REQUIRED TO ATTACH TO MAIN DRAIN LINE.

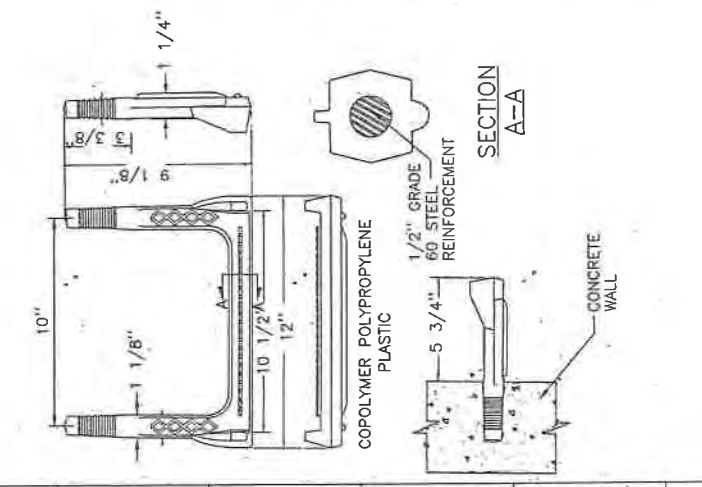
**NOTES:**

- DOUBLE CATCH BASIN SHOWN. SEE S&WB DWG. NO. D-873 FOR SINGLE TYPE CATCH BASIN CASTINGS.
- SEE S&WB DWG. NO. D-873 FOR SECTIONS & DETAILS OF CATCH BASINS 1, 2 & 3 AND METAL CASTING.
- INSIDE & OUTSIDE OF BRICK WALLS, BENCHES, & INVERTS TO BE MORTARED WITH A WATERPROOFING COMPOUND, THICKNESS OF 1/4" IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
- CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
- SEE S&WB DWG. NO. D-3264 FOR DROP INLETS.
- SEE S&WB DWG. NO. D-3431-A & D-3431-B FOR MOUNTABLE CATCH BASINS.
- SEE S&WB DWG. NO. D-8292 FOR TWO PIECE GRATE, FRAME AND COVER.
- MAX. DEPTH OF CATCH BASIN CANNOT EXCEED 5' UNLESS APPROVED BY S&WB ENGINEER.
- FRAME & GRATE SHALL CONFORM TO EAST JORDAN IRON WORKS, V-4310 CURB INLETS SERIES.

SCALE: N.T.S.

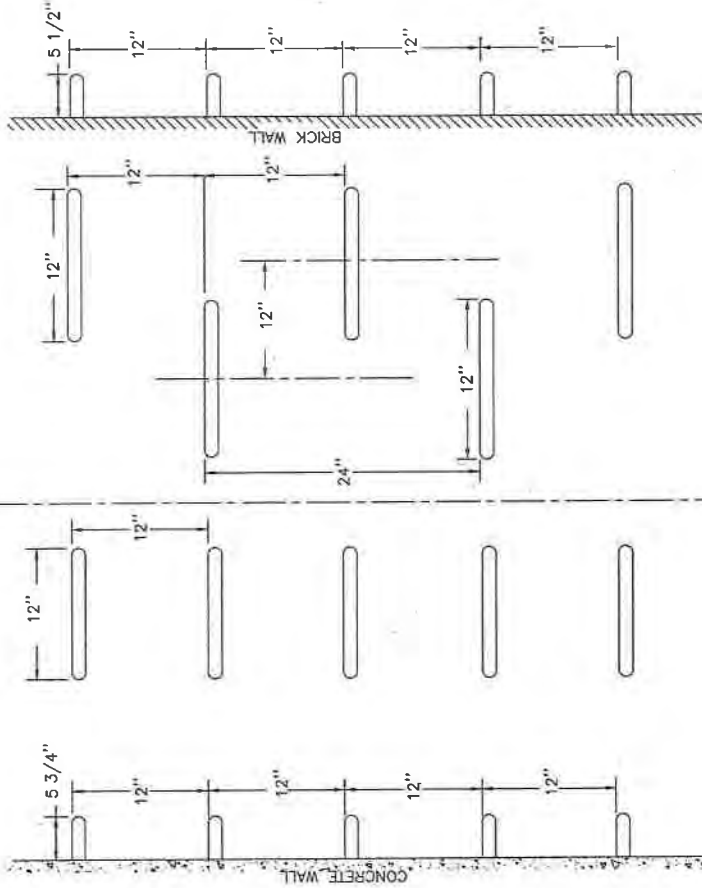
NO.	DATE	REVISION	BY
1	02-08-07	ISSUED FRAME & GRATE	D.M.C.
2	03-09-07	REVISED AND ADDED NOTES	D.M.C.
3		DESCRIPTION	
<b>SEWERAGE AND WATER BOARD</b>			
DETAIL OF STD. DOUBLE VERTICAL CATCH BASIN			
DATE	BY	APP. BY	DWG. NO.
NOV. 14, 1906	F.T.		D-873A
SHEET NO.			





STEPS FOR PRE-CAST CONCRETE MANHOLE

N. T. S.



STEPS FOR BRICK WALL MANHOLE

N. T. S.

**NOTES:**

1. STEP IS A 1/2" GRADE 60 STEEL, REINFORCING ROD ENCAPSULATED WITH A COPOLYMER POLYPROPYLENE COVER, FIBERGLASS OR ALUMINUM STEPS MAY BE CONSIDERED BUT MUST BE APPROVED BY THE S&WB ENGINEER.
2. RELATED A.S.T.M. C-478, D-4101. AND A-615.
3. STEPS ARE NOT PERMITTED IN CATCH BASINS.
4. STEPS ARE STAGGERED FOR CONCRETE BOX CANALS.
5. FOR PRE-CAST STEPS, DRILL STEPS INTO BRICK AND SEAL WITH EPOXY.

REV.	DATE	DESCRIPTION	BY
1	7/11/88	GENERAL REVISION	A.L.A.
2			

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

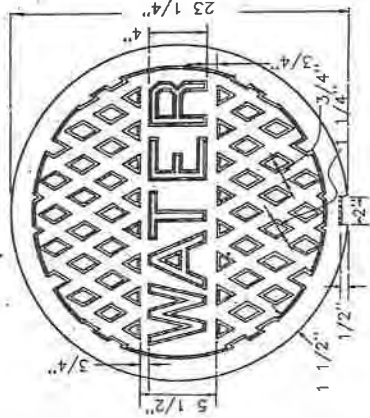
DETAIL OF STEPS FOR CONCRETE &  
BRICK MANHOLES

SCALE: AS SHOWN

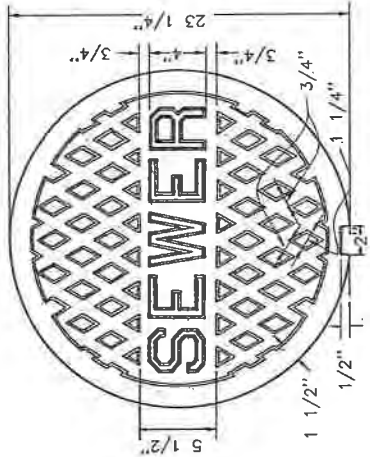
DWG. NO. D-1359



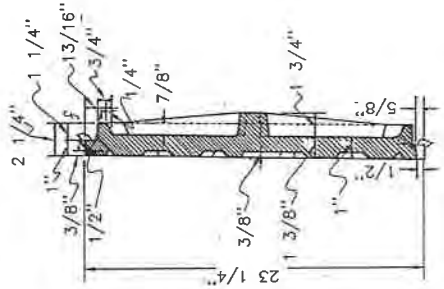




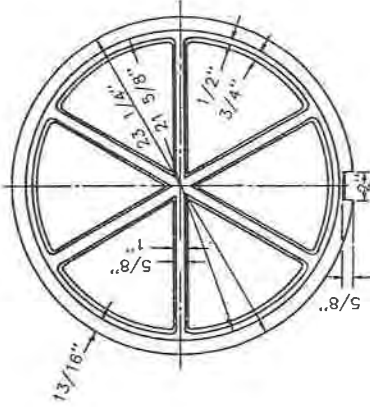
TOP VIEW OF WATER  
MANHOLE COVER



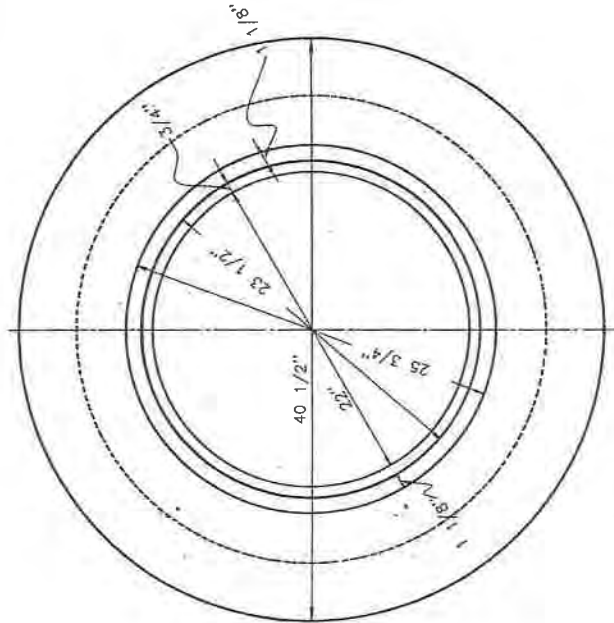
TOP VIEW OF SEWER  
MANHOLE COVER



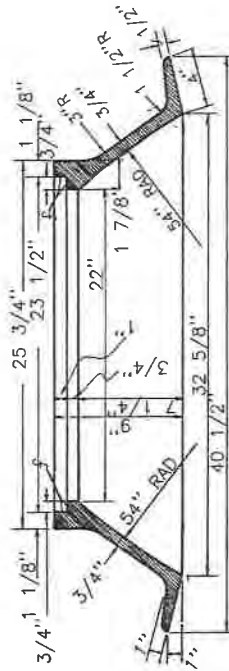
CROSS SECTION OF  
MANHOLE COVER  
(SEWER & WATER)



BOTTOM VIEW OF  
MANHOLE COVER  
(SEWER & WATER)



PLAN OF FLARING FRAME MANHOLE



CROSS SECTION OF FLARING  
MANHOLE FRAME  
(SEWER & WATER)

NOTE:

1. f = MACHINED SURFACE
2. FRAME & COVER SHALL CONFORM TO EAST JORDAN IRON WORKS, V-1501 FRAME AND COVER.

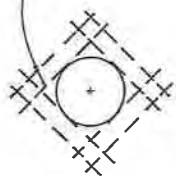
DESIGNED BY	DATE	SCALE
CHECKED BY	DATE	SCALE
<b>SEWERAGE AND WATER BOARD</b>		
<b>OF NEW ORLEANS</b>		
DETAILS OF SEWER AND WATER MANHOLE CASTINGS		
 ENGINEER		
DWG. NO. 3143-E-1		

SCALE: N.T.S.



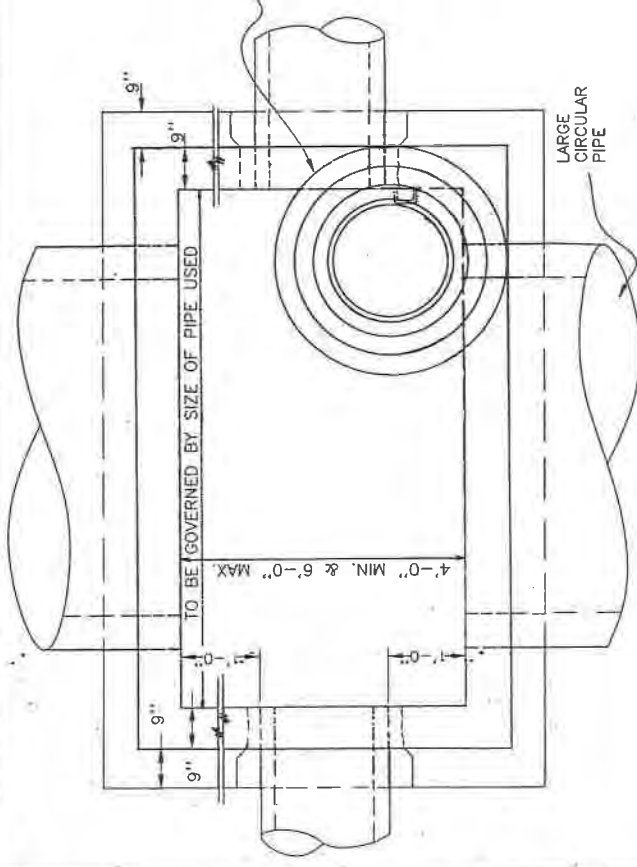


#4 BARS @ 6"  
O.C. BOTTOM OF  
SLAB ONLY

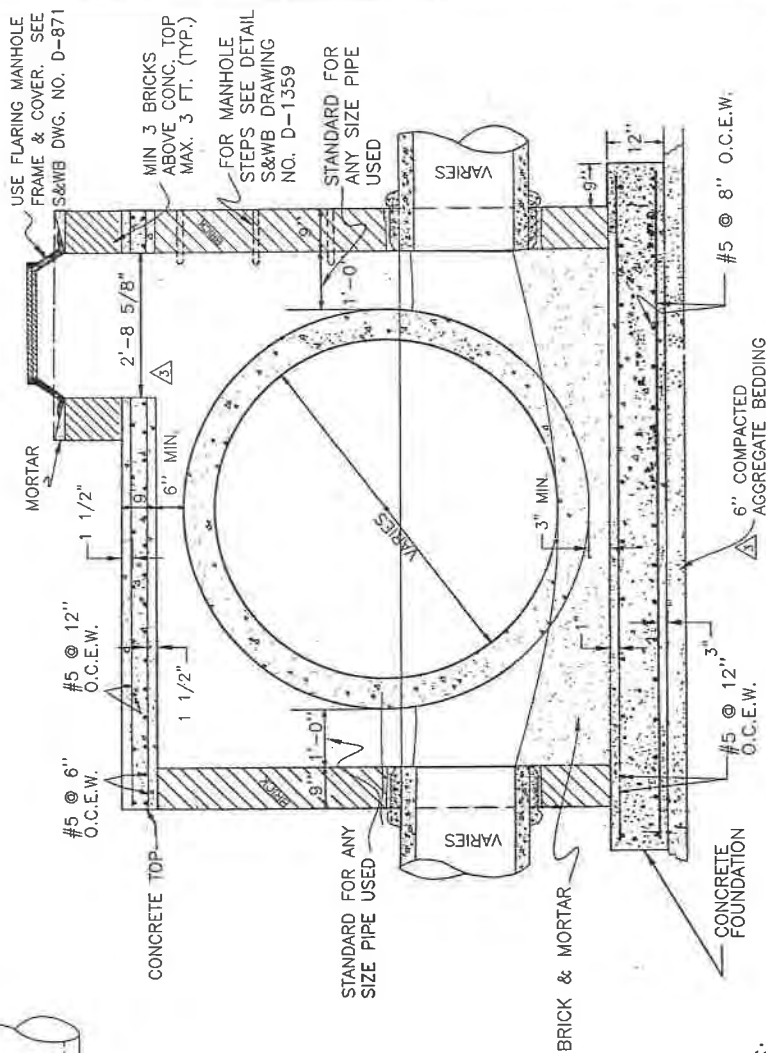


DETAIL-1

FOR RE-STEEL  
AROUND MANHOLE  
OPENING SEE  
DETAIL-1.



PLAN VIEW



SECTION VIEW

NOTES:

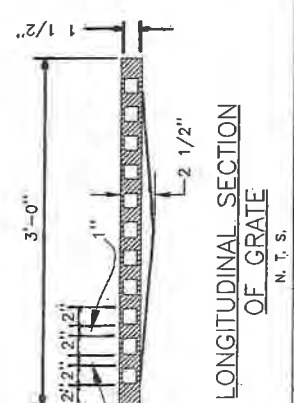
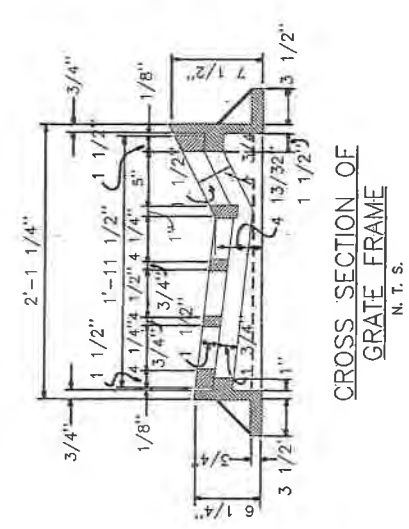
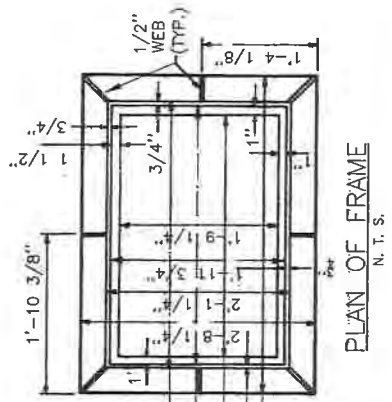
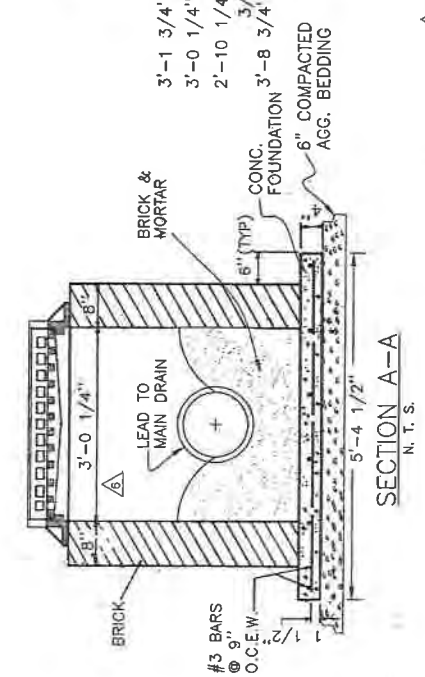
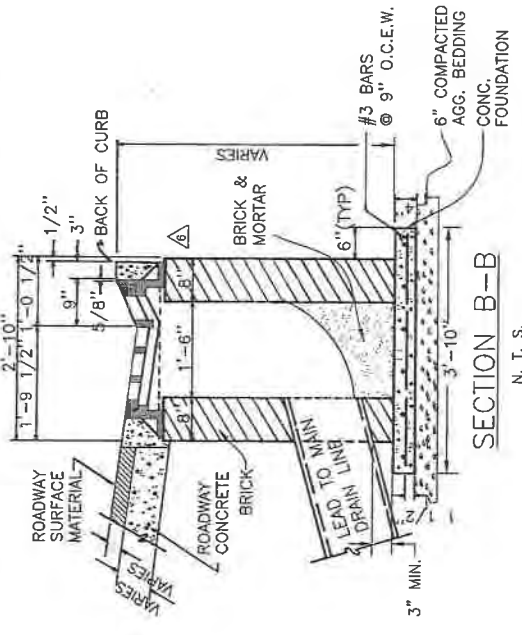
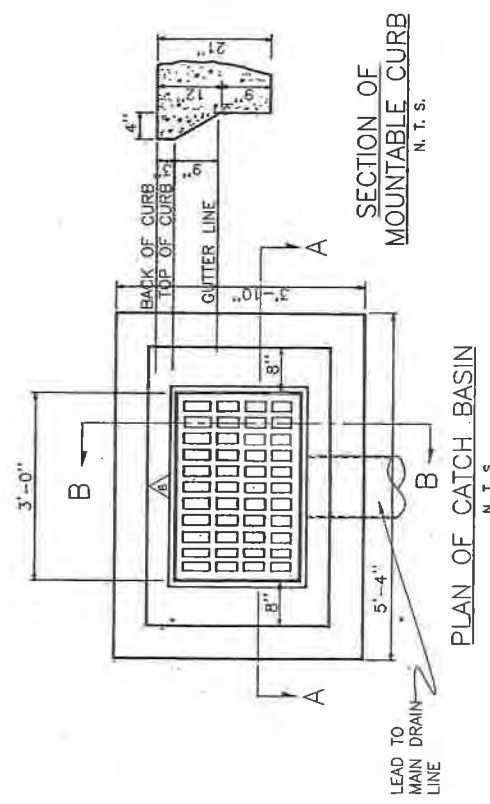
1. INSIDE & OUTSIDE BRICK WALLS, BENCHES, & INVERTS TO BE MORTARED WITH WATERPROOFING COMPOUND FOR THICKNESS OF 1/4" IN ACCORDANCE WITH SPECIFICATIONS.
2. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.

DATE	BY	CHK.	APP.	DATE	BY
11-2-67	AKK				
1. 11-2-67 NOTE FOR PLASTERING R.P.D.					
2. 9-2-67 NEW BOTTOM B STEEL					
3. 10-1-67 BELLEVILLE, MISSOURI AND SPOD NOTCH					
DWG. NO. D-3340					
SHEET NO.					

SCALE: N.I.S.

DETAIL OF STANDARD MANHOLE FOR CIRCULAR PIPE GREATER THAN 36"

SEWERAGE AND WATER BOARD OF NEW ORLEANS



**NOTES:**

1. INSIDE & OUTSIDE BRICK WALLS, BENCHES, & INVERTS TO BE MORTARED WITH WATERPROOFING COMPOUND FOR THICKNESS OF 1/4" IN ACCORDANCE WITH SPECIFICATION.
2. THIS GRATE IS THE SAME AS THE GRATES ON DOUBLE MOUNTABLE CATCH BASIN SHOWN ON DWG. NO. D-3431-B.
3. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
4. FRAME & GRATE SHALL CONFORM TO EAST JORDAN IRON WORKS, INC. V-4510 GUTTER INLET OR APPROVED EQUAL.

NO.	DATE	DESCRIPTION	BY
1	11-17-58	REVISION, ADDED HORIZONTAL BAR	BT
2			

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

DETAIL OF STANDARD SINGLE MOUNTABLE CATCH BASIN

SCALE: AS SHOWN

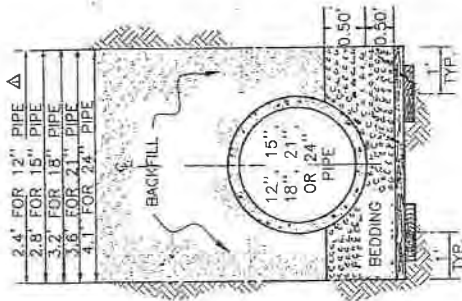
DWG. NO. D-3431-AA

REV. 10-1-58

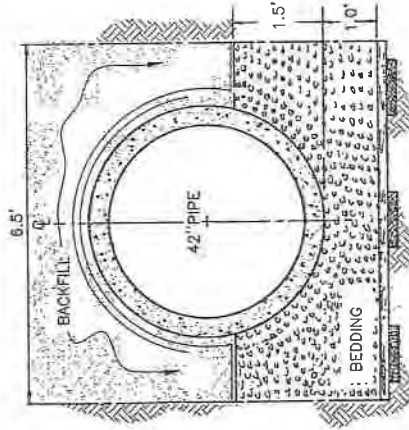
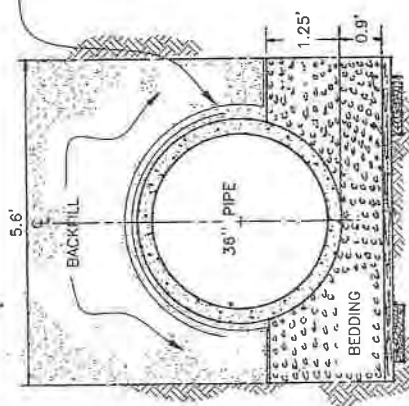
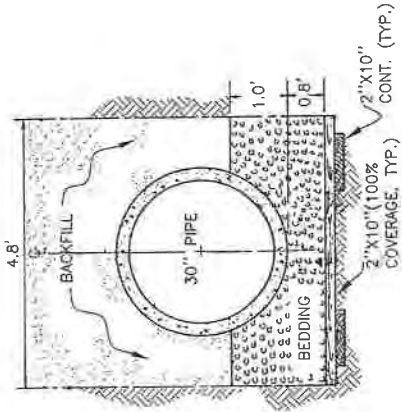
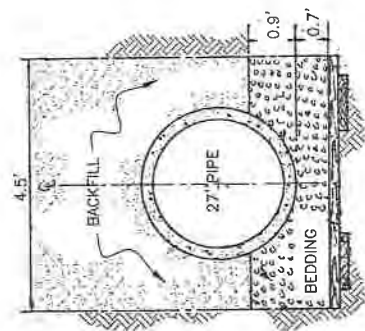
PROJECT NO.







2.4' FOR 12" PIPE  
2.8' FOR 15" PIPE  
3.2' FOR 18" PIPE  
3.6' FOR 21" PIPE  
4.1' FOR 24" PIPE



**NOTES:**

1. SECTIONS TO BE APPLICABLE FOR SIZE PIPE BEING INSTALLED.
2. FOUNDATION LUMBER SHALL CONSIST OF A CONTINUOUS TRANSVERSE LAYER OF 2" BOARDS (MIN. 8" WIDE) ON 2"X10" SILLS DRIVEN INTO SOIL.
3. BEDDING SHALL BE PUMPED SAND, INSTALLED IN 12" LIFTS AND COMPACTED TO 95% OF MAX DENSITY FOR PIPES 36" AND GREATER, BEDDING SHALL BE COMPACTED AGGREGATE.
4. BACKFILL MATERIAL TO BE PUMPED SAND INSTALLED IN 12" LIFTS AND COMPACTED TO 95% OF MAX. DENSITY.
5. IF THE WORKING SURFACE OF SOIL BENEATH THE PIPE IS CONSIDERED UNACCEPTABLE BY THE S&WB INSPECTOR, THE SOIL MUST BE REMOVED DOWN TO STABLE AND ACCEPTABLE MATERIAL AND REPLACED WITH COMPACTED PUMPED SAND.
6. ALL PIPE JOINTS TO BE WRAPPED WITH 2" WIDE FILTER CLOTH WITH 3 FT. MIN. OVERLAP.
7. ALL PIPE TO BE RCP CLASS III UNLESS OTHERWISE NOTED.

CONCRETE PIPE BEDDING SECTIONS FROM 12" TO 42"

SCALE: N.T.S.

NO.	DATE	BY	DESCRIPTION
1			

REVISIONS, REVISED AND ADDED NOTES

DATE	BY	DESCRIPTION

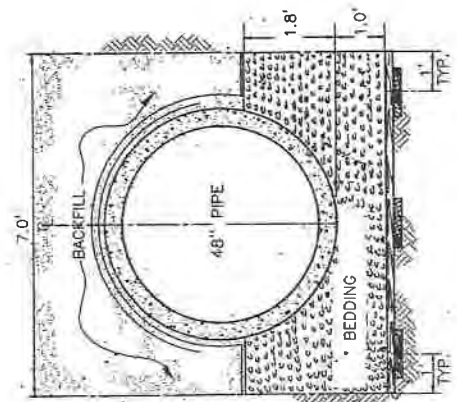
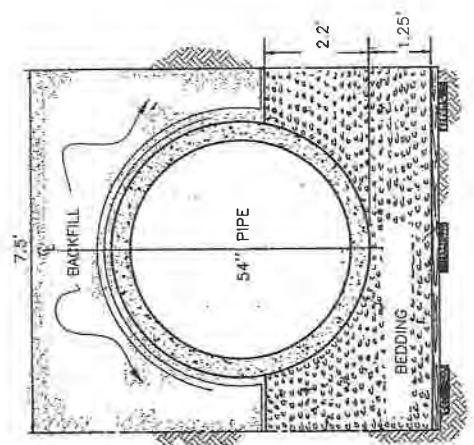
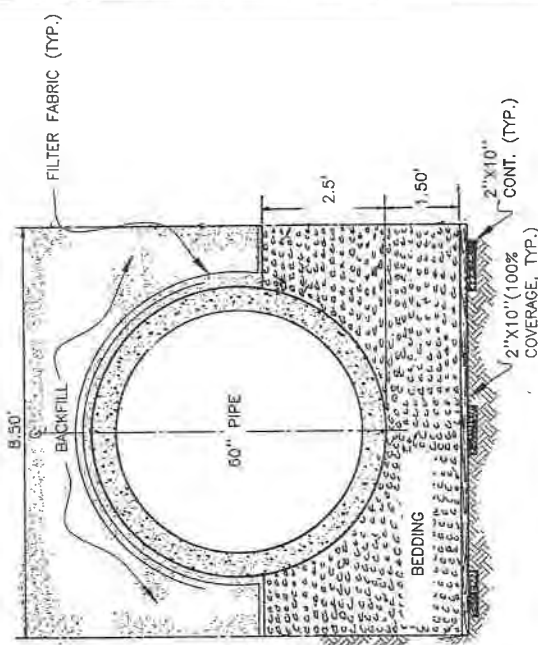
**SEWERAGE AND WATER BOARD**

TYPICAL SECTIONS OF  
CONCRETE PIPE BEDDING  
FROM 12" TO 42" PIPE

SCALE: N.T.S.

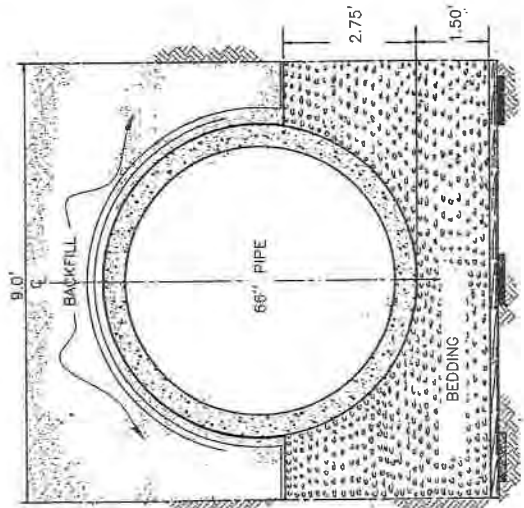
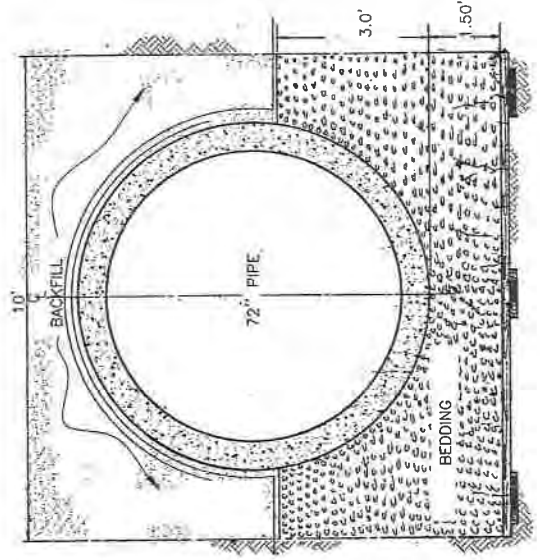
DWG. NO. D-3809





**NOTE:**

1. SECTIONS TO BE APPLICABLE FOR SIZE PIPE BEING INSTALLED.
2. FOUNDATION LUMBER SHALL CONSIST OF A CONTINUOUS TRANSVERSE LAYER OF 2" BOARDS (MIN. 8" WIDE) ON 2"X10" SILLS DRIVEN INTO SOIL.
3. BEDDING SHALL BE COMPACTED AGGREGATE.
4. BACKFILL MATERIAL TO BE PUMPED SAND INSTALLED IN 12" LIFTS AND COMPACTED TO 95% MAX. DENSITY.
5. IF THE WORKING SURFACE OF SOIL BENEATH THE PIPE IS CONSIDERED UNACCEPTABLE BY THE S&WB INSPECTOR, THE SOIL MUST BE REMOVED DOWN TO STABLE AND ACCEPTABLE MATERIAL AND REPLACED WITH COMPACTED PUMPED SAND.
6. ALL PIPE JOINTS TO BE WRAPPED WITH 2" WIDE FILTER CLOTH WITH 3 FT. MIN. OVERLAP.
7. ALL PIPE TO BE RCP CLASS III UNLESS OTHERWISE NOTED.



CONCRETE PIPE BEDDING SECTIONS FROM 48" TO 72"

SCALE: N.T.S.

NO.	DATE	DESCRIPTION	BY
1	02-00	DESIGNED, REVISED AND ADDED NOTES	D.M.C.
2	04-00	REVISED AND ADDED NOTES	D.M.C.
3	05-00	REVISED AND ADDED NOTES	D.M.C.

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

TYPICAL SECTIONS OF  
CONCRETE PIPE BEDDING  
FROM 48" TO 72"

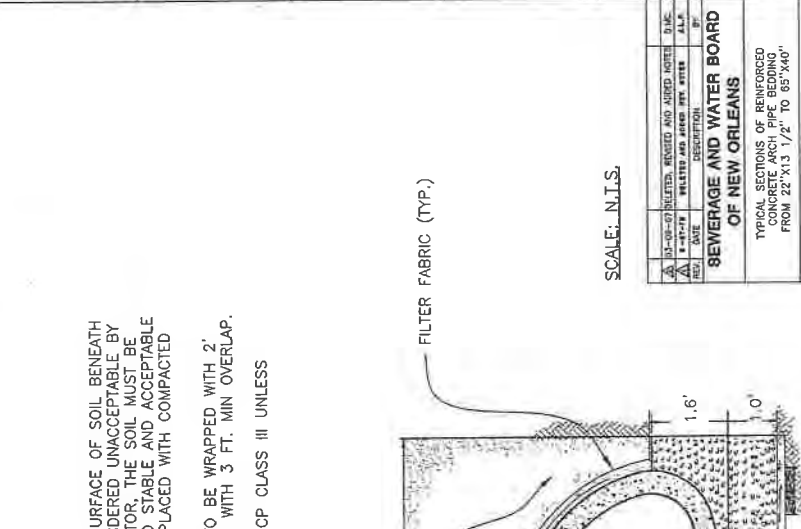
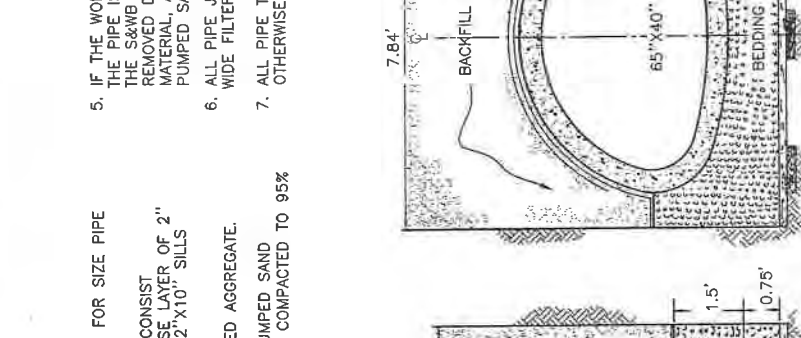
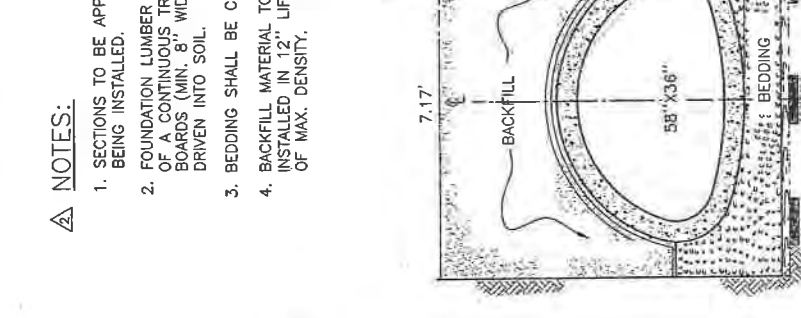
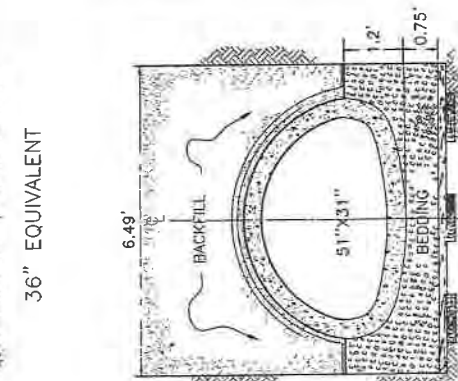
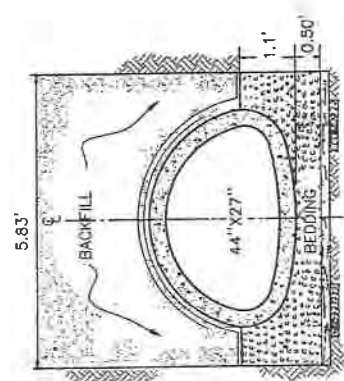
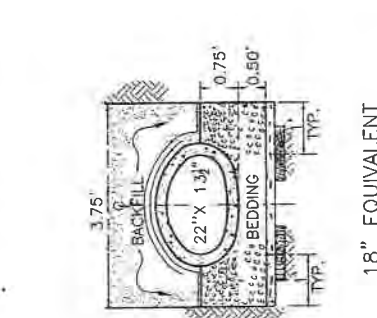
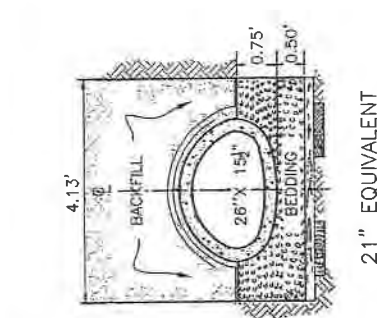
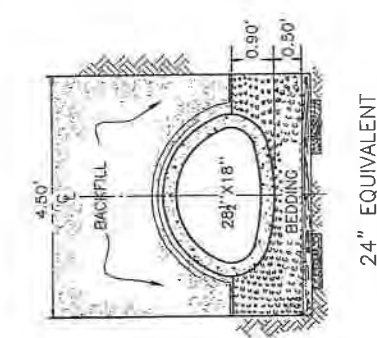
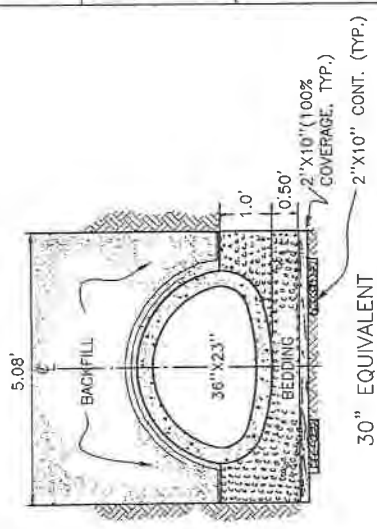
SCALE: N.T.S.

DWG. NO. D-3810

DATE: 11-10-03

PROJECT NO. 11-10-03

1 OF 2



**NOTES:**

1. SECTIONS TO BE APPLICABLE FOR SIZE PIPE BEING INSTALLED.
2. FOUNDATION LUMBER SHALL CONSIST OF A CONTINUOUS TRANSVERSE LAYER OF 2" BOARDS (MIN 8" WIDE) ON 2' X 10" SILLS DRIVEN INTO SOIL.
3. BEDDING SHALL BE COMPACTED AGGREGATE.
4. BACKFILL MATERIAL TO BE PUMPED SAND INSTALLED IN 12" LIFTS AND COMPACTED TO 95% OF MAX. DENSITY.
5. IF THE WORKING SURFACE OF SOIL BENEATH THE PIPE IS CONSIDERED UNACCEPTABLE BY THE SAWB INSPECTOR, THE SOIL MUST BE REMOVED DOWN TO STABLE AND ACCEPTABLE MATERIAL AND REPLACED WITH COMPACTED PUMPED SAND.
6. ALL PIPE JOINTS TO BE WRAPPED WITH 2' WIDE FILTER CLOTH WITH 3 FT. MIN OVERLAP.
7. ALL PIPE TO BE RCP CLASS III UNLESS OTHERWISE NOTED.

SCALE: N.T.S.

REV.	DATE	DESCRIPTION	D.W.G.	CHECKED	DATE
1	11-10-07	REVISED AND ADDED NOTES			
2	11-10-07	REVISED AND ADDED NEW NOTES			

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

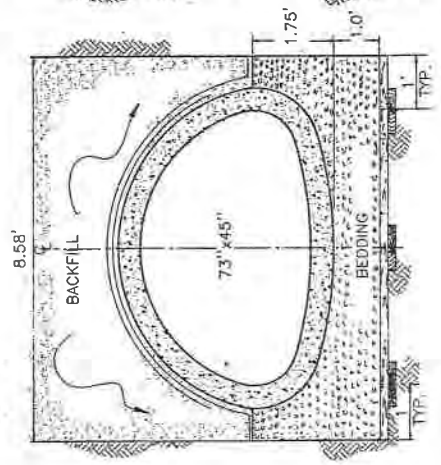
TYPICAL SECTIONS OF REVERSO  
CONCRETE ARCH PIPE BEDDING  
FROM 22" X 13 1/2" TO 65" X 40"

DWG. NO. D-3933

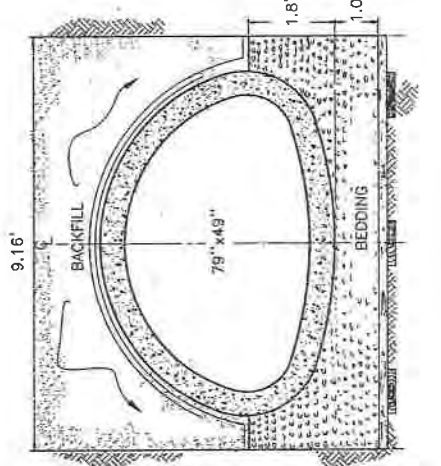
18" EQUIVALENT      21" EQUIVALENT      24" EQUIVALENT      30" EQUIVALENT      36" EQUIVALENT      42" EQUIVALENT      48" EQUIVALENT      54" EQUIVALENT

CONCRETE PIPE BEDDING SECTIONS FROM 22" X 13 1/2" TO 65" X 40"

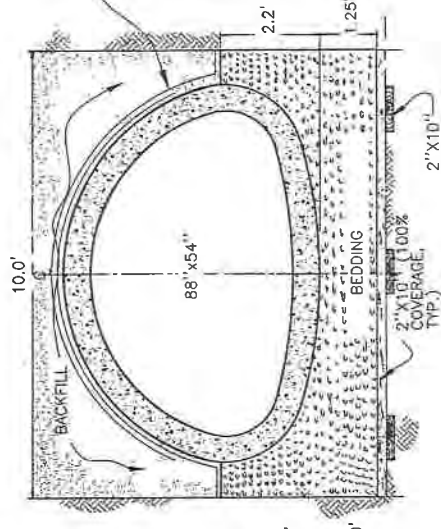




60" EQUIVALENT



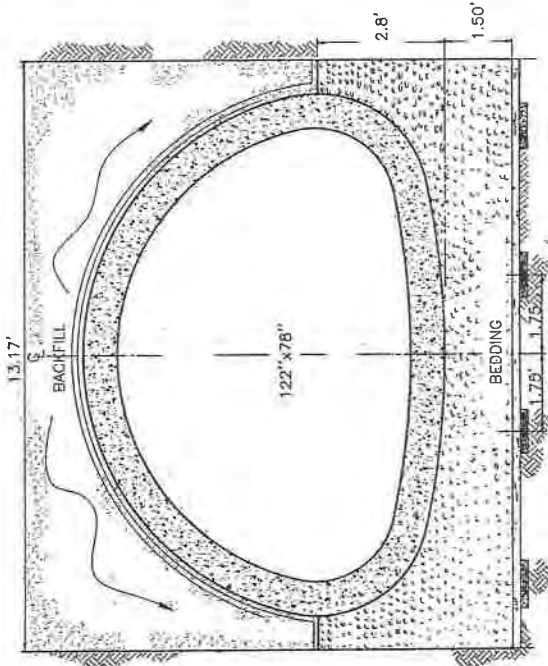
66" EQUIVALENT



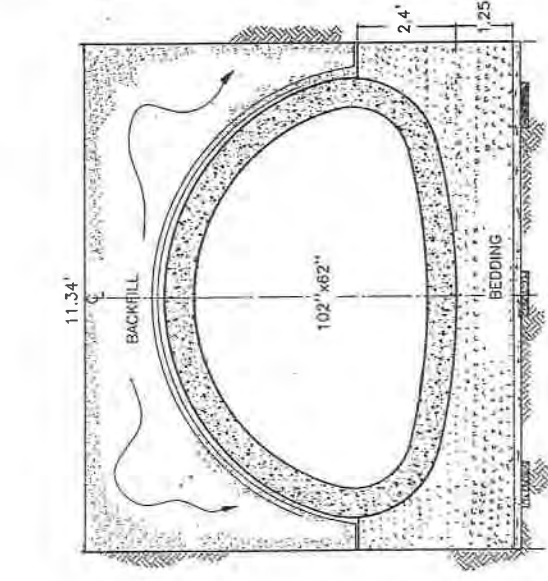
72" EQUIVALENT CONT. (TYP.)

**NOTES:**

1. SECTIONS TO BE APPLICABLE FOR SIZE PIPE BEING INSTALLED.
2. FOUNDATION LUMBER SHALL CONSIST OF A CONTINUOUS TRANSVERSE LAYER OF 2" BOARDS (MIN. 8" WIDE) ON 2' X 10" SILLS DRIVEN INTO SOIL.
3. BEDDING SHALL BE COMPACTED AGGREGATE.
4. BACKFILL MATERIAL TO BE PUMPED SAND INSTALLED IN 12" LIFTS AND COMPACTED TO 95% OF MAX. DENSITY.
5. IF THE WORKING SURFACE OF SOIL BENEATH THE PIPE IS CONSIDERED UNACCEPTABLE BY THE SAWB INSPECTOR, THE SOIL MUST BE REMOVED DOWN TO STABLE AND ACCEPTABLE MATERIAL AND REPLACED WITH COMPACTED PUMPED SAND.
6. ALL PIPE JOINTS TO BE WRAPPED WITH 2' WIDE FILTER CLOTH WITH 3 FT. MIN. OVERLAP.
7. ALL PIPE TO BE RCP CLASS III UNLESS OTHERWISE NOTED.



96" EQUIVALENT



84" EQUIVALENT

**CONCRETE PIPE BEDDING SECTIONS  
FROM 73" X 45" TO 122" X 78"**

SCALE: N.I.S.

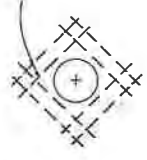
REV.	DATE	DESCRIPTION	BY	CHK.
1	01-17-17	REVISED AND ADDED NOTES	DMC	
2	01-17-17	REVISED AND ADDED NEW NOTES	A.L.P.	

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

TYPICAL SECTIONS OF REINFORCED  
CONCRETE ARCH BEDDINGS  
(FROM 73" X 45" TO 122" X 78")

DATE: 01-17-17  
SCALE: N.I.S.  
DWG. NO. D-3934  
PROJECT: [REDACTED]

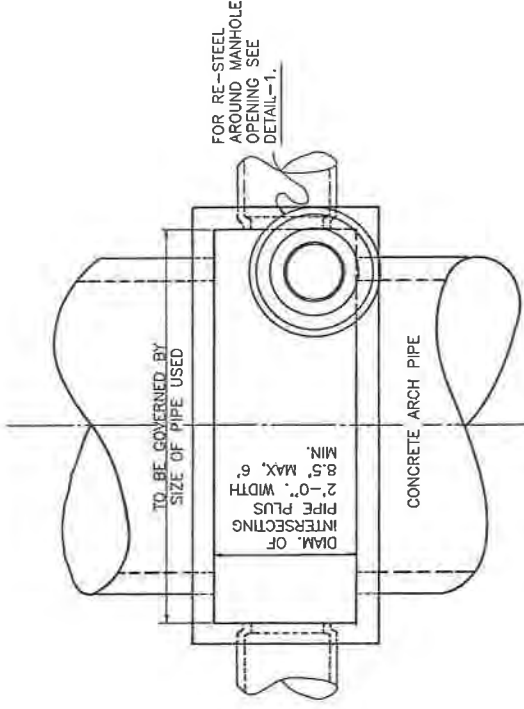
#4 BARS @ 6"  
O.C. BOTTOM OF  
SLAB ONLY



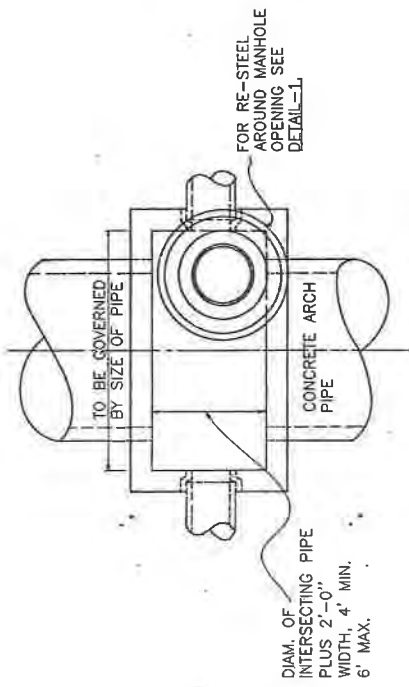
DETAIL-1

**NOTES:**

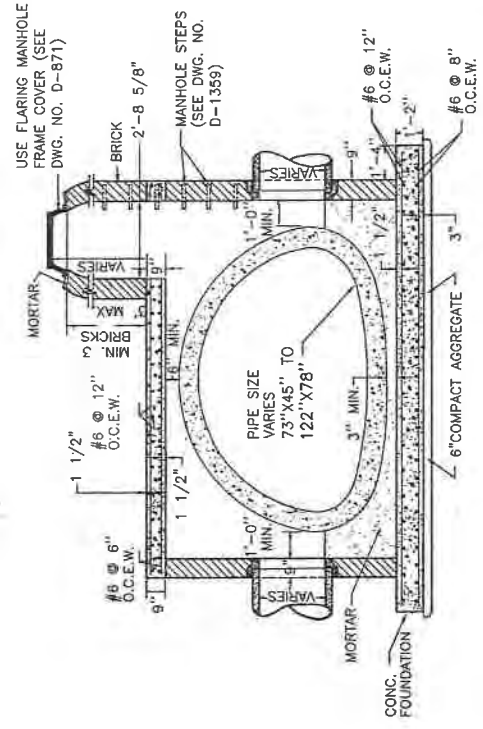
1. FOR ARCH PIPE SIZES SMALLER THAN SHOWN ON THIS DRAWING, USE STANDARD ROUND MANHOLE AS INDICATED ON DWG. NO. D-870.
2. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
3. INSIDE & OUTSIDE BRICK WALLS, BENCHES, & INVERTS TO BE MORTARED WITH WATERPROOFING COMPOUND FOR THICKNESS OF 1/4" IN ACCORDANCE WITH SPECIFICATION.



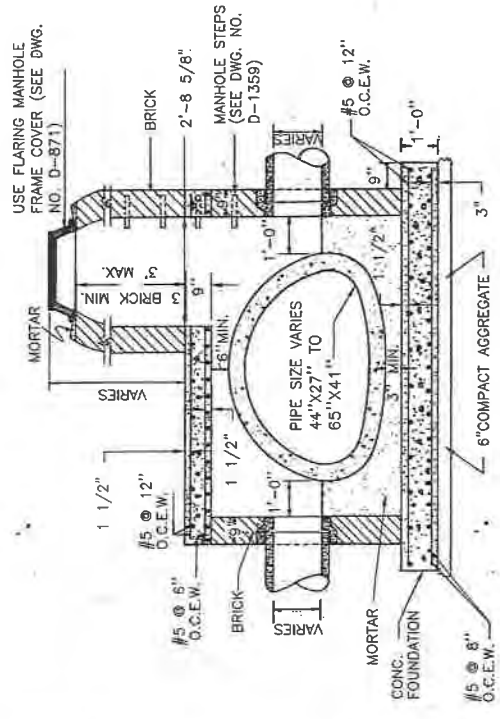
PLAN VIEW



PLAN VIEW



SECTION VIEW



SECTION VIEW

SCALE: N.T.S.

NO.	DATE	DESCRIPTION	BY
1	10-10-88	ISSUED FOR BIDDING	...
2	11-17-88	REVISED AND ADDED NOTES	...
3	12-15-88	REVISED AND ADDED NOTES	...
4	1-17-89	REVISED AND ADDED NOTES	...

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

DETAIL OF STANDARD MANHOLES  
FOR LARGE CONCRETE ARCH PIPE

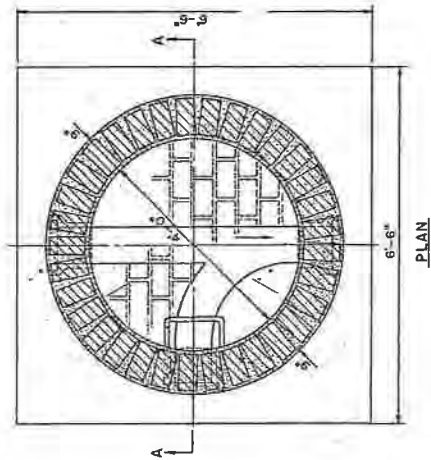
DATE: 10-10-88 BY: ...

DWG. NO. D-3937



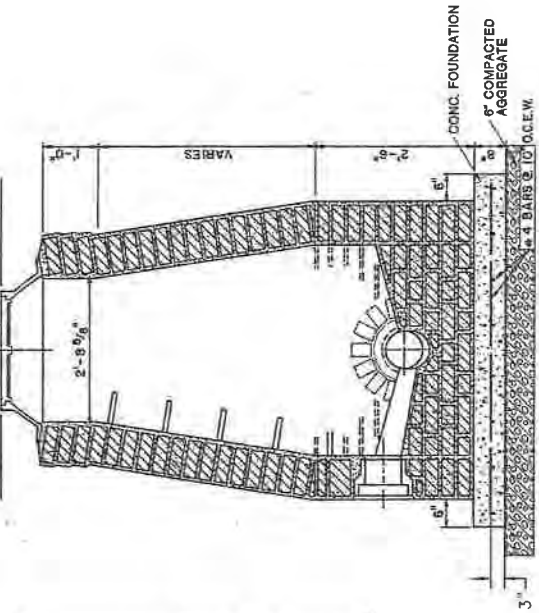


SEWER MH. COVER WITH CASTING PER SAWB DWG. NO. 3143-E-1

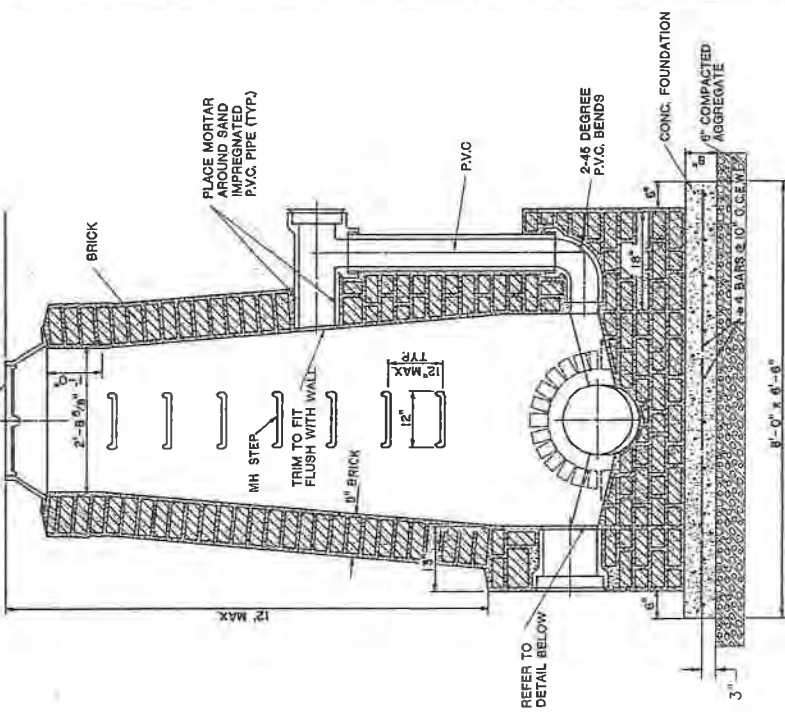


PLAN

SEWER MH. COVER WITH CASTING PER SAWB DWG. NO. 3143-E-1



SECTION A-A TYPICAL

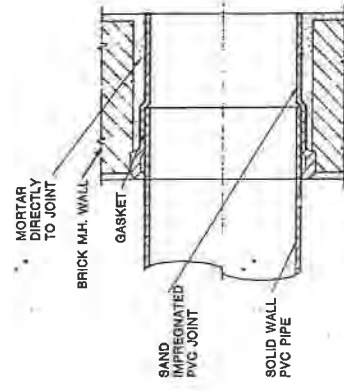


SECTION OF SEWER DROP MANHOLE

N. T. S.

NOTES:

1. MANHOLE WALL THICKNESS IS 9" TO A DEPTH OF 12' AND 13" THICK BELOW 12' DEPTH.
2. MANHOLES THAT EXCEED 17' IN DEPTH SHALL USE A 10" CONCRETE SLAB IN LIEU OF AN 8" CONCRETE SLAB.
3. SEWER MANHOLE WALLS SHALL BE MADE ADEQUATELY RESISTANT TO HARSH AGGRESSIVE CHEMICALS BY EITHER AN APPROVED CONCRETE BATCH ADDITIVE OR PROTECTIVE WATERPROOFING COMPOUND.
4. A DROP CONNECTION SHALL BE CONSTRUCTED WHERE THE INFLOW INVERTS ARE 18" OR MORE ABOVE THE OUTFLOW INVERTS.
5. REFERENCE DWG. NO. D-1359 FOR STEPS.
6. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.



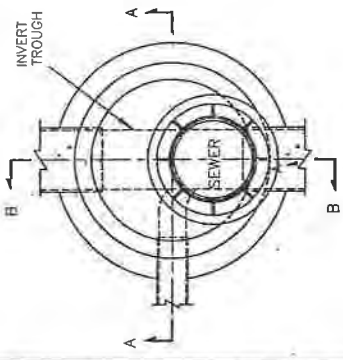
BRICK WALL DETAIL

N. T. S.

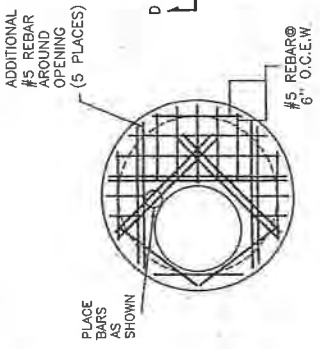
SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY	APP.
<b>SEWERAGE AND WATER BOARD OF NEW ORLEANS</b>				
TYPICAL SEWER BRICK MANHOLE AND DROP MANHOLE				
DES.	B. HENSON			
TRC.	M. JOHNSON			
CHECKED	M. JOHNSON			
DATE	03-20-2013 PER 101			
DWG. NO. 6178-B-6				

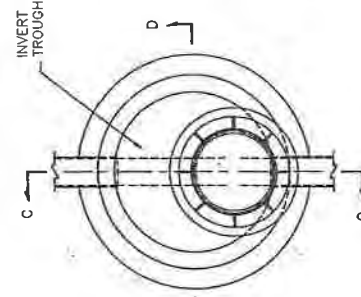




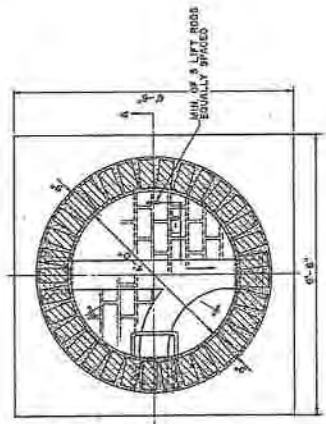
PLAN VIEW



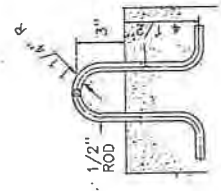
CONCRETE TOP SLAB PLAN



PLAN VIEW

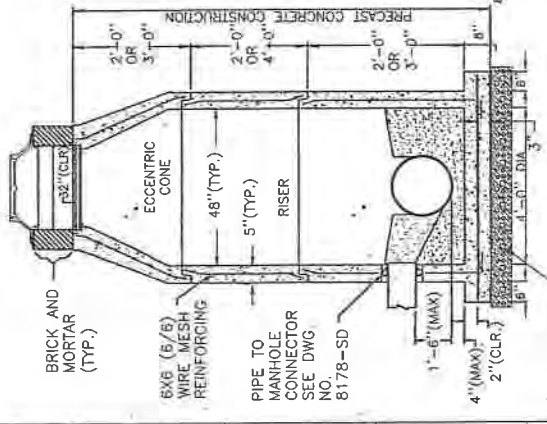


PLAN OF MANHOLE TROUGH



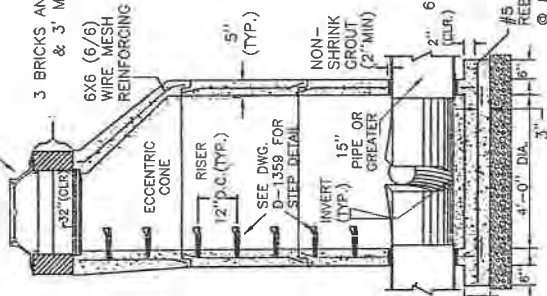
LIFTING EYE DETAIL

STANDARD MANHOLE FRAME AND COVER SEE DWG. NO. D-871 OR DWG. NO. 3143-E-1 FOR MANHOLE CASTINGS



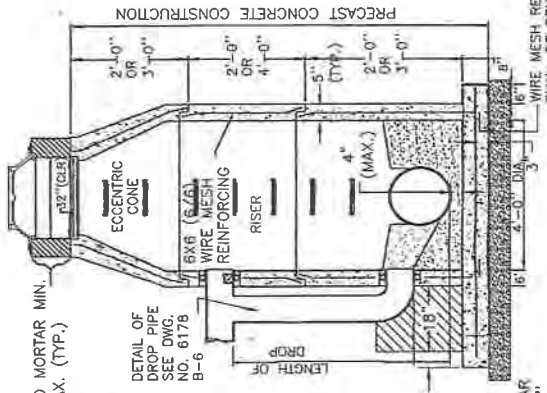
SECTION A-A

STANDARD MANHOLE DETAIL



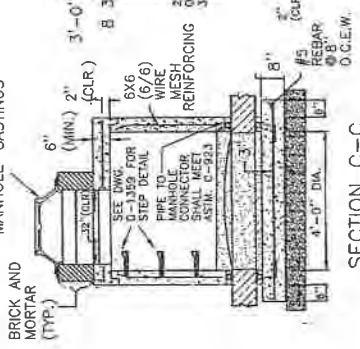
SECTION B-B

STANDARD MANHOLE DETAIL

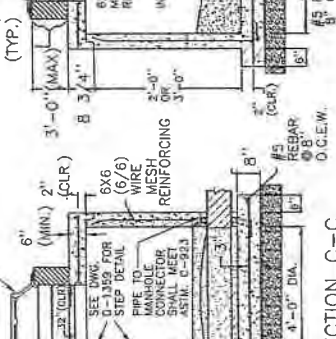


SECTION E-E

STANDARD DROP MANHOLE DETAIL



SECTION C-C



SECTION D-D

NOTES:  
 1. REINFORCING STEEL TO MEET A.S.T.M. A-615 GRADE 60. CONCRETE TO BE 4000 P.S.I. IN 28 DAYS, TYPE II CEMENT, REINFORCING TO MEET A.A.S.H.O. HD-40.  
 2. JOINTS BETWEEN PRECAST UNITS WILL BE SEALED WITH A RUBBER GASKET TO MEET A.S.T.M. C-443.  
 3. PRECAST CONCRETE STRUCTURE TO MEET A.S.T.M. C-478.  
 4. 6" OR LARGER PIPE, USE RESILIENT BOOT CONNECTOR  
 5. 16" OR LARGER PIPE, USE MIN. 2" NON-SHRINK GROUT.  
 6. MANHOLES THAT EXCEED 17" IN DEPTH SHALL USE A 10" THICK BASE IN LIEU OF AN 8" THICK BASE.  
 7. SEWER MANHOLE WALLS SHALL BE MADE ADEQUATELY RESISTANT TO HARSH AGGRESSIVE CHEMICALS BY EITHER AN APPROVED CONCRETE BATCH ADDITIVE OR PROTECTIVE WATERPROOFING COMPOUND.  
 8. A CONSTRUCTION SHALL BE CONSTRUCTED WHERE THE INVERTS ARE 18" OR MORE ABOVE THE OUTFLOW INVERTS.  
 9. REFERENCE DWG. NO. D-1359 FOR STEPS.

REV.	DATE	DESCRIPTION	BY	CHK.
1	03-10-1971	PREPARED FOR		
2	03-10-1971	REVISED		
3	03-10-1971	REVISED		
4	03-10-1971	REVISED		
5	03-10-1971	REVISED		
6	03-10-1971	REVISED		
7	03-10-1971	REVISED		
8	03-10-1971	REVISED		
9	03-10-1971	REVISED		
10	03-10-1971	REVISED		

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 TYPICAL PRE-CAST CONCRETE MANHOLE  
 DWG. NO. 6178-B-6A





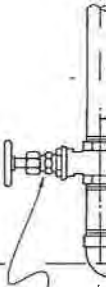






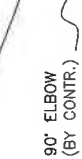


NEW 4" VALVE (FOR 18" TO 24" MAIN)  
6" VALVE (FOR OVER 24" MAIN)  
(BY CONTR.)



CHLORINE/WATER  
INPUT BY S&WB.  
CONTRACTOR TO BE  
RESPONSIBLE FOR  
THE WATER SUPPLY.

NEW GATE VALVE  
(SAME SIZE AS PIPE "B")  
(BY CONTR.)



24" MIN. TO 48" MAX.

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

PIPE "B"  
(BY CONTR.)

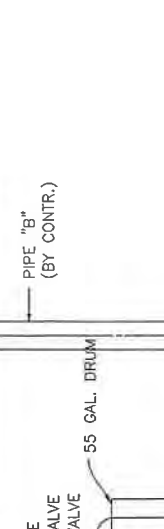


DIAGRAM FOR PRESSURE  
TESTING NEW MAINS

2" CORP. COCK FURN'D.  
AND INSTALLED BY  
THE CONTRACTOR  
AT LOCATION  
GIVEN BY ENGR.  
(SEE NOTE NO.6.)

2" RIGID  
PIPE

STAND PIPE "B"

55 GAL. DRUM

PUMP

2" HOSE

2" GATE VALVE

2" CHECK VALVE

2" SOLID PLUG

GAUGE

1/4" PIPE

1/4" GATE VALVE

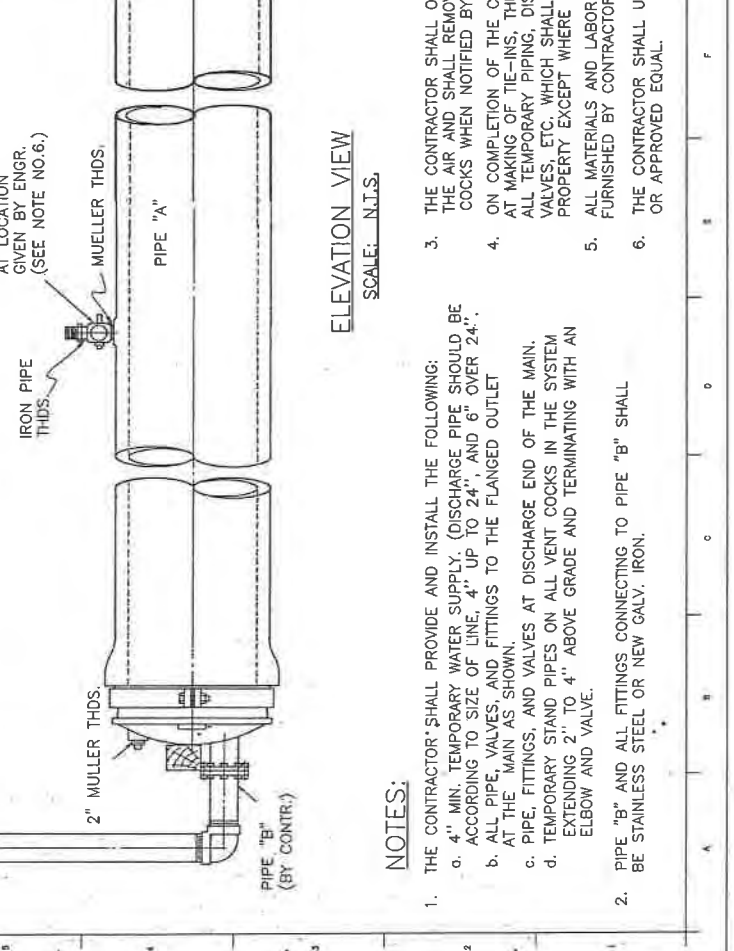
2" X 2" X 1/4" TEE

WATER MAIN

BOTH ENDS OF MAIN SHALL BE EITHER:  
a. WELDED STEEL DISHED HEAD WITH 6"  
FLANGED OUTLET FOR STEEL PIPE.  
b. DUCTILE IRON SLEEVE AND PLUG WITH 6"  
TAP FOR DUCTILE IRON PIPE.

ELEVATION VIEW

SCALE: N.T.S.



NOTES:

- THE CONTRACTOR SHALL PROVIDE AND INSTALL THE FOLLOWING:
  - 4" MIN. TEMPORARY WATER SUPPLY. (DISCHARGE PIPE SHOULD BE ACCORDING TO SIZE OF LINE, 4" UP TO 24", AND 6" OVER 24".)
  - ALL PIPE, VALVES, AND FITTINGS TO THE FLANGED OUTLET AT THE MAIN AS SHOWN.
  - PIPE, FITTINGS, AND VALVES AT DISCHARGE END OF THE MAIN.
  - TEMPORARY STAND PIPES ON ALL VENT COCKS IN THE SYSTEM EXTENDING 2" TO 4" ABOVE GRADE AND TERMINATING WITH AN ELBOW AND VALVE.
- PIPE "B" AND ALL FITTINGS CONNECTING TO PIPE "B" SHALL BE STAINLESS STEEL OR NEW GALV. IRON.
- THE CONTRACTOR SHALL OPEN AND CLOSE ALL VALVES TO EXPEL THE AIR AND SHALL REMOVE THE VENT PIPES AND CLOSE THE COCKS WHEN NOTIFIED BY THE S&WB ENGINEER.
- ON COMPLETION OF THE CHLORINATION PROCESS AND AT MAKING OF TIE-INS, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PIPING, DISHED HEADS, SLEEVES, PLUGS, VALVES, ETC. WHICH SHALL REMAIN THE CONTRACTOR'S PROPERTY EXCEPT WHERE NOTED ON CONTRACT DRAWINGS.
- ALL MATERIALS AND LABOR REQUIRED FOR PRESSURE TEST TO BE FURNISHED BY CONTRACTOR.
- THE CONTRACTOR SHALL USE 2" MUELLER H-10003 CORPORATION COCK OR APPROVED EQUAL.

NO.	DATE	DESCRIPTION	BY
1	12-10-07	REVISION NOTES AND DRAWING	O.A.C.
2	6-27-08	NOTE NO. 5 - REVISION	W.P.
3	4-13-09	ALTERNATE TEST PIPER	W.P.
4	8-20-09	TEST COCKS REVIEWED	W.P.

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

PRESSURE TEST CONNECTION ON NEW  
WATER MAINS (18" AND LARGER),  
FLUSHING AND CHLORINATION

DATE: 12-13-07 SHEET NO. DWG. NO. 7005-W



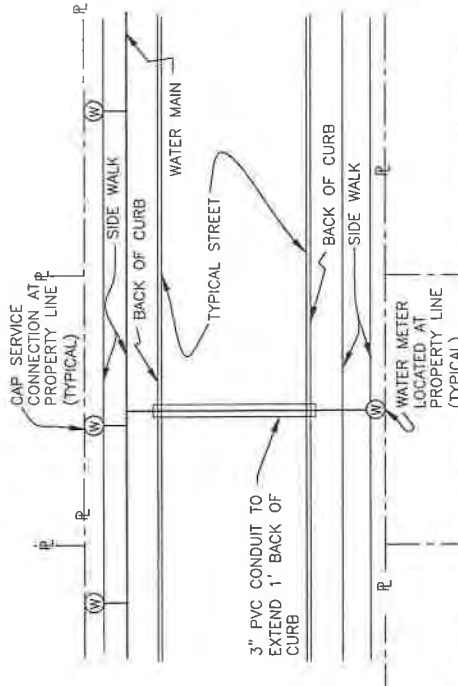
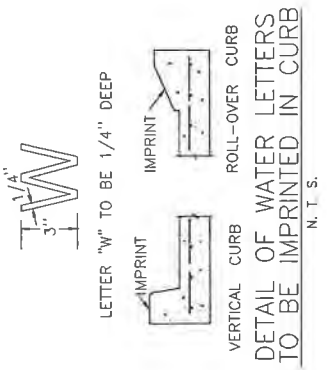
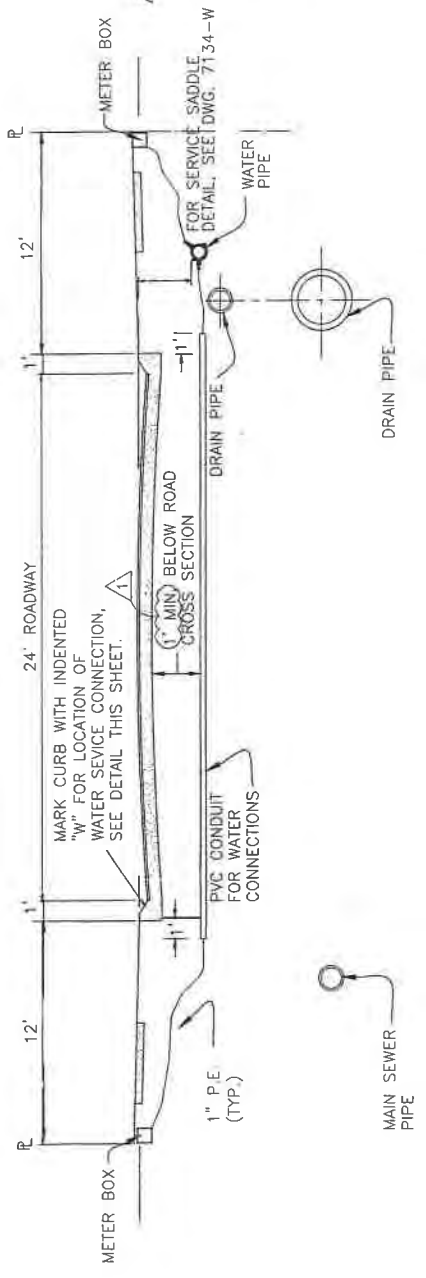


DIAGRAM OF WATER METER SERVICE CONNECTION

NOTE:

1. TUBING MATERIAL SHALL BE TYPE "K" COPPER OR POLYETHYLENE PE 3406 AND SHALL CONFORM TO THE LATEST ISSUE OF ASTM D-2737 AND D-1248 FOR TYPE 3 OR 4 GRADE P-34 CLASS "C"
2. WATER SERVICE CONNECTION TO BE NEAR CENTERLINE OF LOT, MIN. OF 5' HORIZONTALLY FROM SEWER H.C.
3. THE LOCATION OF THE WATER SERVICE CONNECTIONS SHALL BE IMPRINTED IN THE CURB WITH AN "W". (SEE DETAIL)
4. ALL BRONZE/BRASS FITTINGS, CONNECTORS, CORPORATION STOPS AND APPURTENANCES SHALL BE OF DOMESTIC MANUFACTURE, SHALL BE MADE OF LEAD FREE BRONZE/BRASS, AND MEET ALL REQUIREMENTS OF AWWA, ASTM AND ANSI FOR USE IN THE POTABLE WATER DISTRIBUTION SYSTEMS.



TYPICAL UTILITY SECTION - FOR 50 FT. R/W

N. T. S.

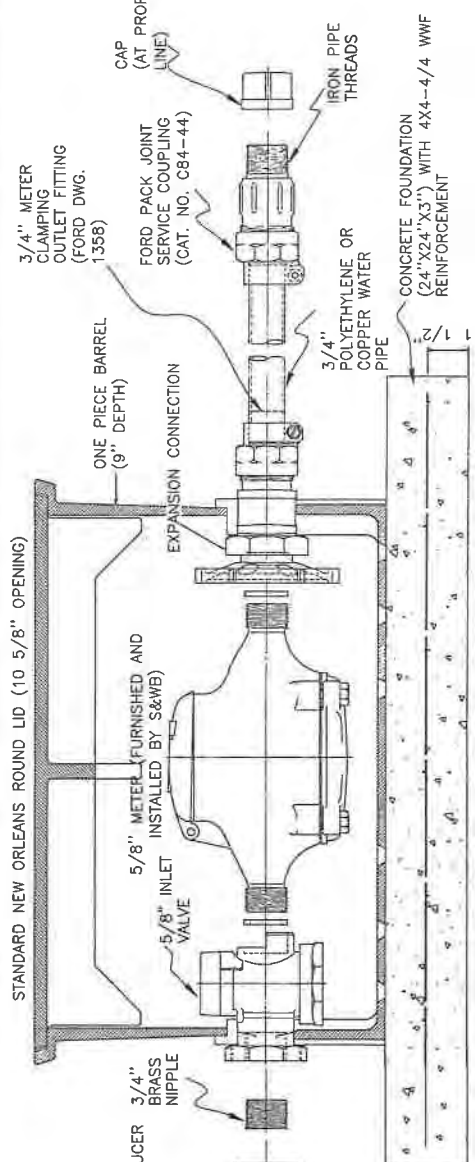
SCALE: N.T.S.

NO.	DATE	REVISION	DESCRIPTION	BY
1	04/18/15		ADDITIONAL NOTE	ONE
2	10/05/15		GENERAL REVISIONS	ONE

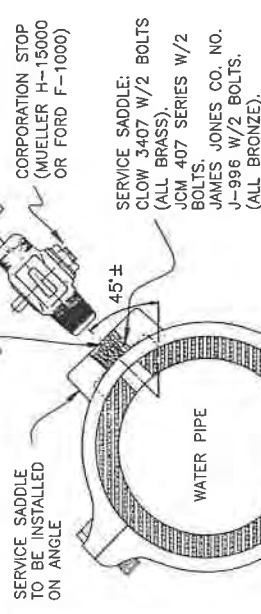
SEWERAGE AND WATER BOARD  
OF NEW ORLEANS

TYPICAL WATER SERVICE CONNECTION

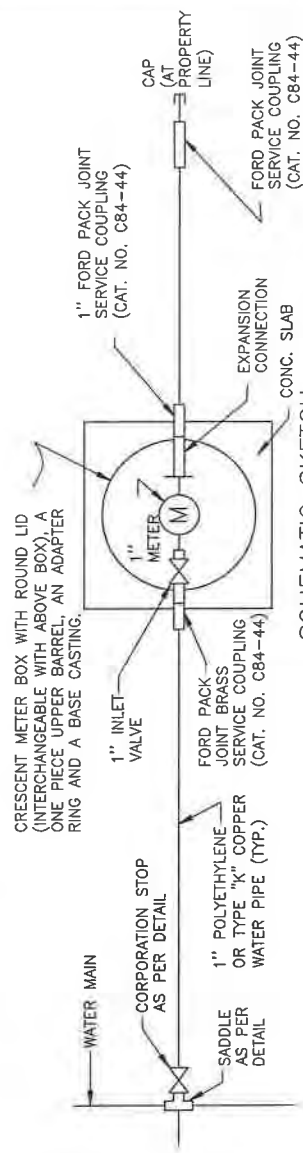
DR.	D. MCCRACKEN
ENGR.	M. JOHNSON
INSP.	A. BLOKER
SCALE	NONE
DATE	09/20/15
DWG. NO.	7134A-W
PROJECT NO.	



**5/8" METER BOX INSTALLATION**



**SERVICE SADDLE**



**1" WATER METER SERVICE CONNECTION**

**SCHEMATIC SKETCH**

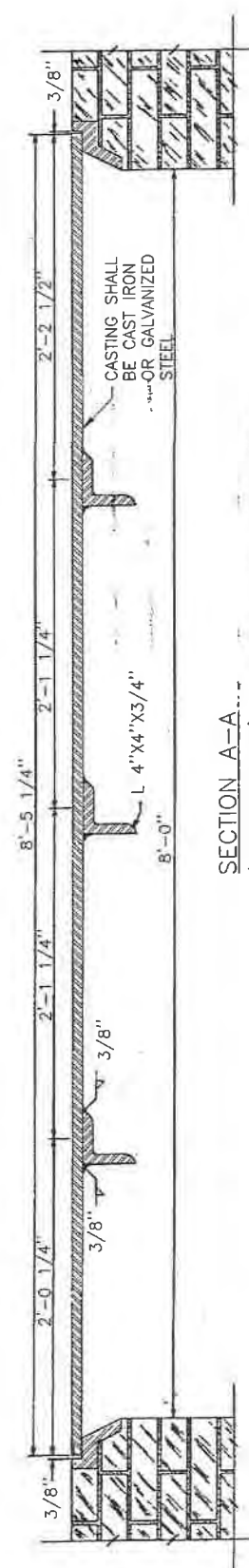
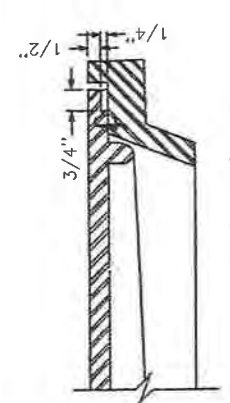
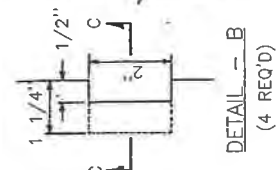
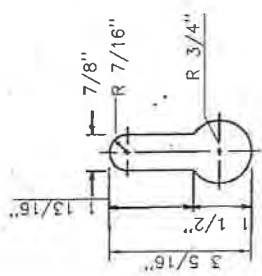
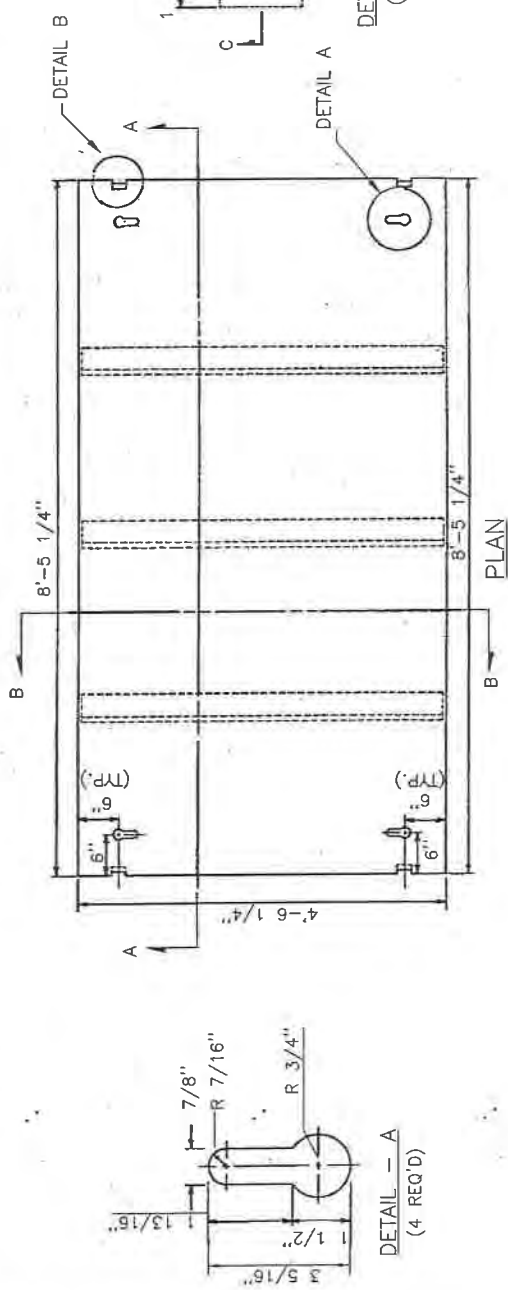
**NOTE:**

1. TUBING MATERIAL SHALL BE TYPE "K" COPPER OR POLYETHYLENE PE 3406 AND SHALL CONFORM TO THE LATEST ISSUE OF ASTM D-9737 AND D-1248 FOR TYPE 3 OR 4 GRADE P-34 CLASS "C"
2. WATER SERVICE CONNECTION TO BE NEAR CENTERLINE OF LOT, MIN. OF 5' HORIZONTALLY FROM SEWER H.C.

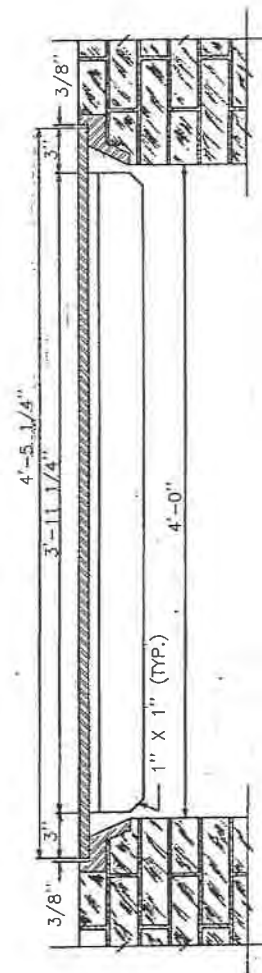
3. ALL BRONZE/BRASS FITTINGS, CONNECTORS, CORPORATION STOPS AND APPURTENANCES SHALL BE OF DOMESTIC MANUFACTURE, SHALL BE MADE OF LEAD FREE BRONZE/BRASS, AND MEET ALL REQUIREMENTS OF AWWA, ASTM AND ANSI FOR USE IN THE POTABLE WATER DISTRIBUTION SYSTEMS.

DATE	DESCRIPTION	BY
04/18/13	ADDITIONAL NOTE	DR
REV	DATE	DESCRIPTION
SEWERAGE AND WATER BOARD		
OF NEW ORLEANS		
WATER METER SERVICE CONNECTION		
FOR 5/8" AND 1" FIXED METER BOX		
DR.	D. MURPHY	GENERAL SUPERVISOR
APP.	A. BELKIN	NOVE
SCALE	AS SHOWN	DWG. NO. 7134-W
DATE: 02-27-2013		





NOTES:  
 1. MANHOLE COVER TO BE GALVANIZED STRUCTURAL GRADE STEEL. (ASTM. A-36 OR EQUAL)



SCALE: N.T.S.

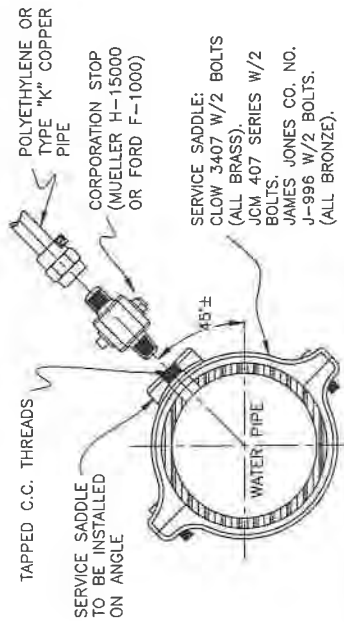
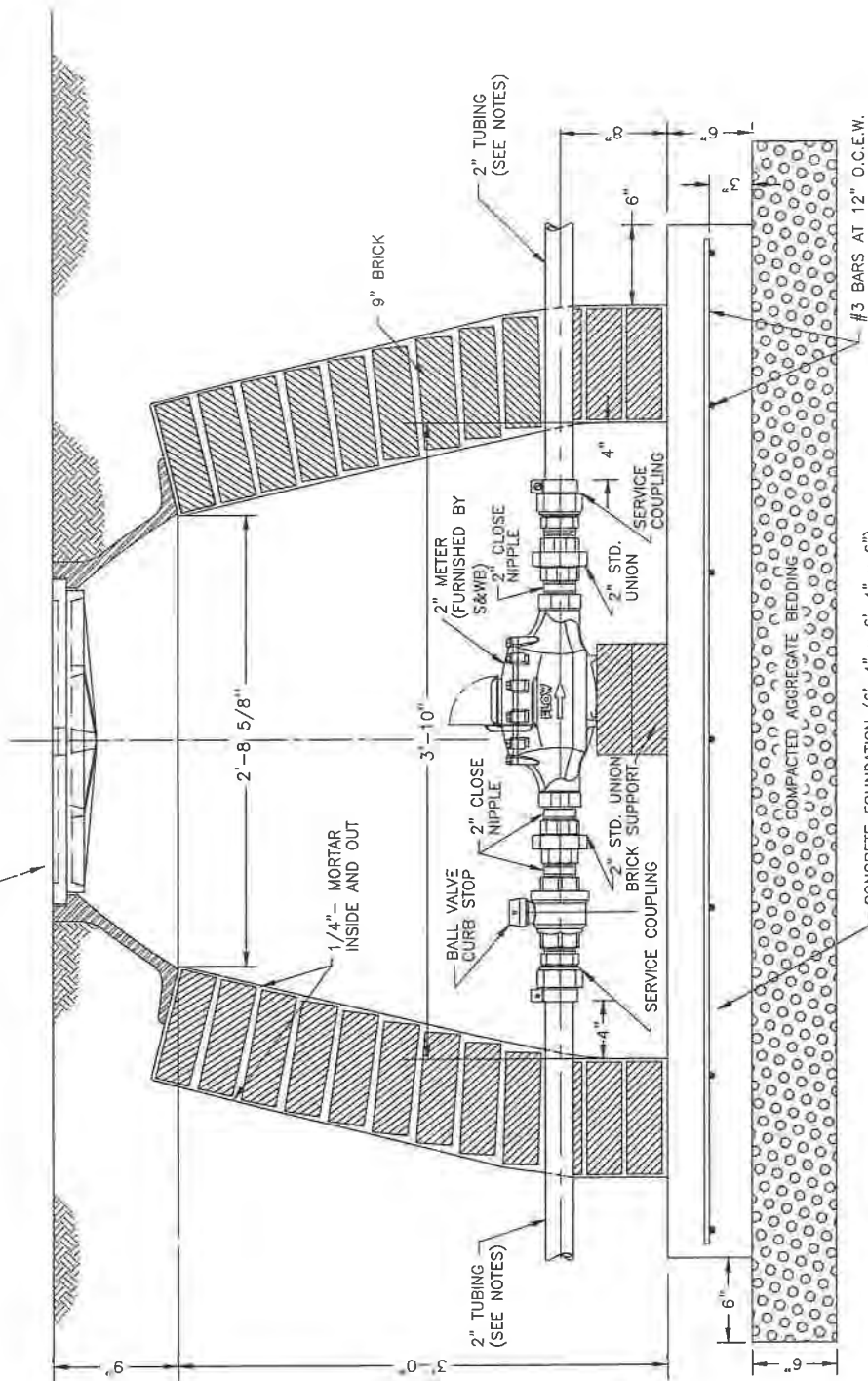
REV.	DATE	DESCRIPTION	BY

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

SPECIAL FABRICATED STEEL COVER FOR CANAL CLEANOUT MANHOLE

DR. D. MCKRAT  
 INC. H. JOHNSON  
 SCALE: AS SHOWN  
 DWG. NO. 7165-D  
 DATE: 03-28-07 11:50 AM

WATER MH COVER AND CASTING (DWG. NO. 3143-E-1)



TAPPED C.C. THREADS  
 SERVICE SADDLE TO BE INSTALLED ON ANGLE  
 POLYETHYLENE OR TYPE "K" COPPER PIPE  
 CORPORATION STOP (MUELLER H-15000 OR FORD F-1000)  
 SERVICE SADDLE: CLOW 3407 W/2 BOLTS (ALL BRASS). JCM. 407 SERIES W/2 BOLTS. JAMES JONES CO. NO. J-996 W/2 BOLTS. (ALL BRONZE).

**2" AND 1 1/2" DOMESTIC METER SERVICE**

**NOTES:**

1. TUBING MATERIAL SHALL BE POLYETHYLENE PE 3406 OR PE 3408, TYPE "K" COPPER PIPE AND CONFORM TO THE LATEST ISSUE OF ASTM D-2737 AND D-1248 FOR TYPE III OR IV GRADE P-34 CLASS C.
2. WHERE A 1 1/2" METER IS REQUIRED, ALL TUBING, COUPLINGS, FITTINGS, ETC. SHALL BE THE SAME AS FOR A 2" CONNECTION, EXCEPT THEY SHALL BE 1 1/2" SIZE.
3. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
4. ALL BRONZE/BRASS FITTINGS, CONNECTORS, CORPORATION STOPS AND APPURTENANCES SHALL BE OF DOMESTIC MANUFACTURE, SHALL BE MADE OF LEAD FREE BRONZE/BRASS, AND MEET ALL REQUIREMENTS OF AWWA, ASTM AND ANSI FOR USE IN THE POTABLE WATER DISTRIBUTION SYSTEMS.

SCALE: N.T.S.

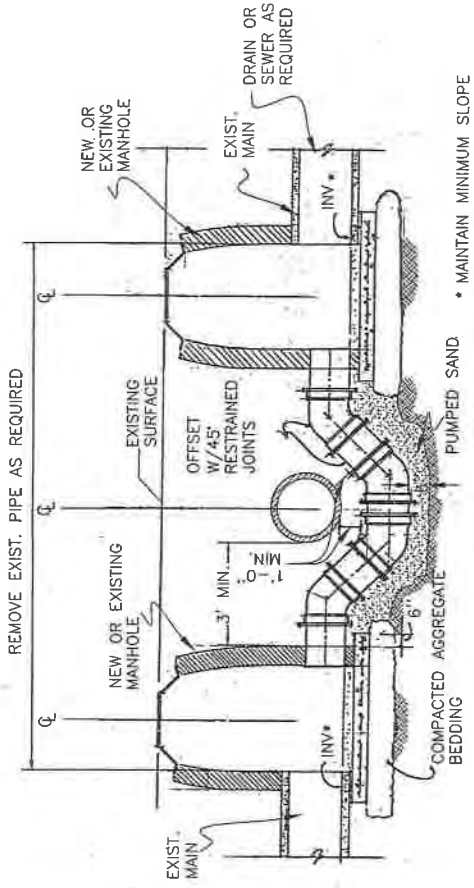
NO.	REV.	DATE	DESCRIPTION	BY	CHK.
1			ISSUED FOR CONSTRUCTION		
2			REVISION		
3			REVISION		
4			REVISION		
5			REVISION		
6			REVISION		
7			REVISION		
8			REVISION		
9			REVISION		
10			REVISION		

SEWERAGE AND WATER BOARD  
 OF NEW ORLEANS

2" & 1 1/2" METER SERVICE CONNECTION

DATE: 02-28-2011  
 DRAWN BY: J. B. BUCKLEY  
 CHECKED BY: J. B. BUCKLEY  
 DWG. NO. 7332-W

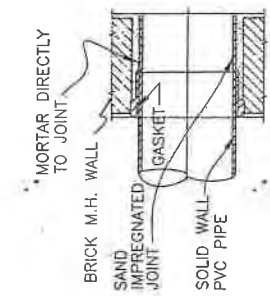




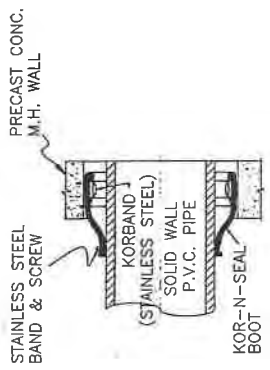
TYPICAL DRAIN & SEWER SIPHON DETAIL  
N. T. S.

NOTES:

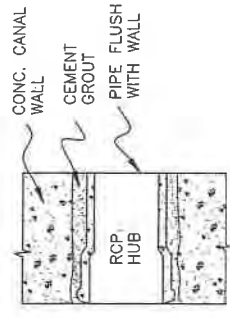
1. ALL FITTINGS AND PIPE TO BE APPROVED BY S&WB ENGINEER.
2. SIPHON AND LOCATION OF MANHOLES MUST BE APPROVED BY THE S&WB ENGINEER.
3. INSIDE & OUTSIDE OF BRICK WALLS, BENCHES, & INVERTS TO BE MORTARED WITH A WATERPROOFING COMPOUND WITH A THICKNESS OF 1/4" IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
4. REFER TO S&WB DWG. NO. D-870 FOR NEW DRAIN MANHOLE OR DWG. NO. 6178-B-6 FOR NEW SEWER MANHOLE.



BRICK WALL

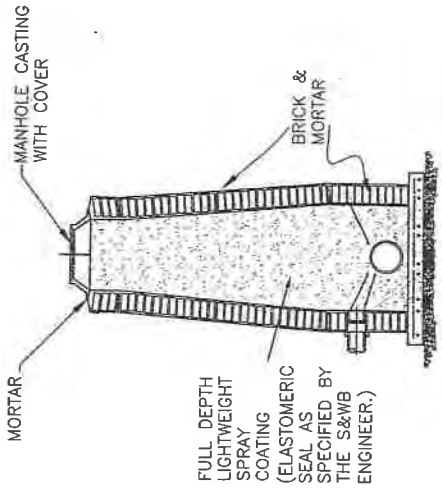


PRECAST CONC. WALL  
MANHOLE CONNECTORS



CONCRETE CANAL WALL

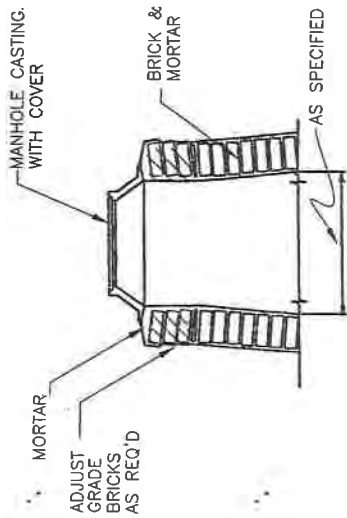
REV.	DATE	DESCRIPTION	BY
<b>SEWERAGE AND WATER BOARD OF NEW ORLEANS</b>			
TYPICAL SEWER AND DRAIN SIPHON & PIPE/WALL CONNECTORS			
ENR.	D. MCCRAY		
DES.	M. JOHNSON		
CHECKED	E. WILHELM		
SCALE	AS SHOWN		
DATE	09-28-01	BY	MS
DWG. NO. 8178-SD			SHEET NO.



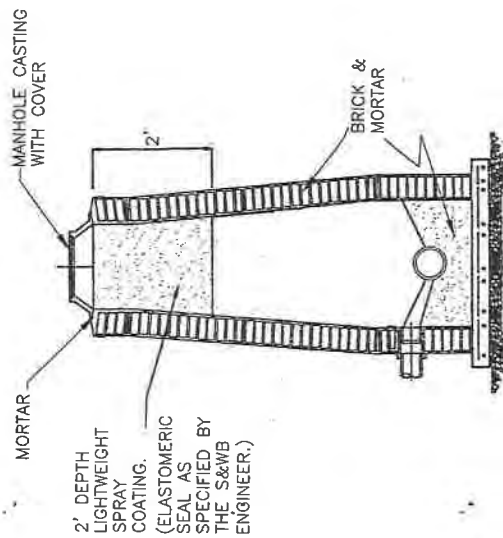
MANHOLE REHABILITATION FULL DEPTH WITH SPRAY APPLIED STRUCTURAL CEMENTITIOUS LINER

NOTES:

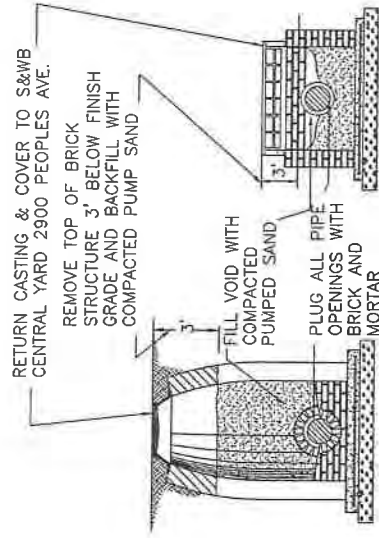
1. LOCATION OF LINER MAY VARY AS SPECIFIED BY THE S&WB ENGINEER.



ADJUST OR REPLACE EXISTING MANHOLE FRAME AND COVER



MANHOLE REHABILITATION 2' DEPTH WITH SPRAY APPLIED STRUCTURAL CEMENTITIOUS LINER

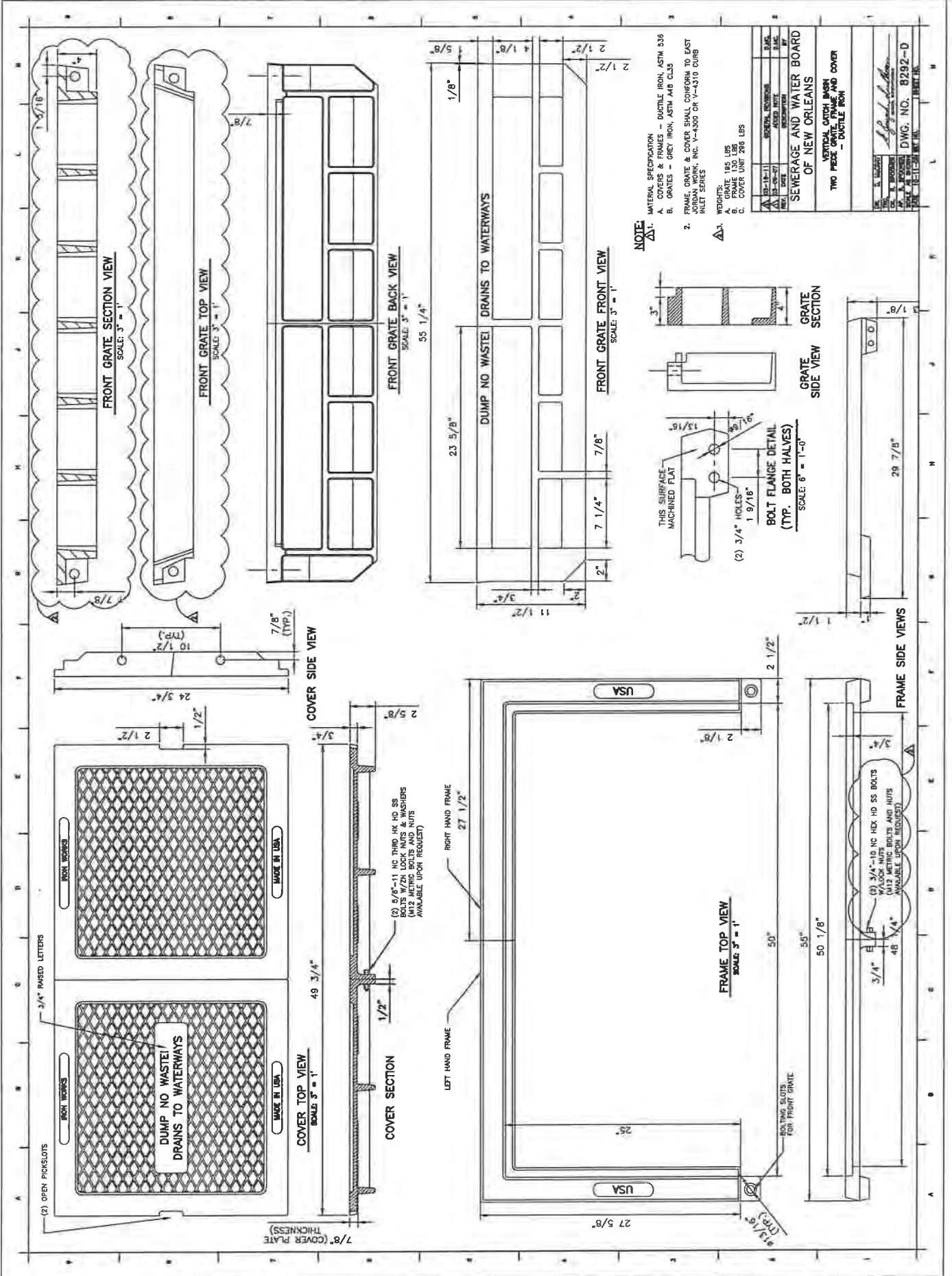


TYPICAL ABANDON MANHOLE AND CATCH BASIN DETAIL

SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY
<b>SEWERAGE AND WATER BOARD OF NEW ORLEANS</b>			
MANHOLE ADJUSTMENT AND REHABILITATION			
DR.	D. MARSHALL		
ENR.	M. JOHNSON		
SCALE	N. BONNER		
DATE	12-27-77	PROJECT NO.	
		DWG. NO.	8180-SD



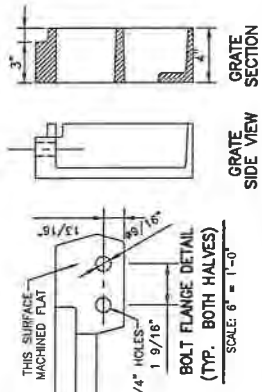


**NOTE:**

1. MATERIAL SPECIFICATION  
 A. COVERS & FRAMES - DUCTILE IRON, ASTM 538  
 B. GRATES - GREY IRON, ASTM A48 CL33

2. FRAME, GRATE & COVER SHALL CONFORM TO EAST RIVER MANUFACTURING CO. INC. 14-0000 OR 14-0100 DUNG INLET SERIES

WEIGHTS:  
 A. FRAME 195 LBS  
 B. FRAME 130 LBS  
 C. COVER UNIT 295 LBS



NO.	REVISION	DATE	BY	CHKD.
1	ISSUED FOR BIDDING			
2	AS NOTED			

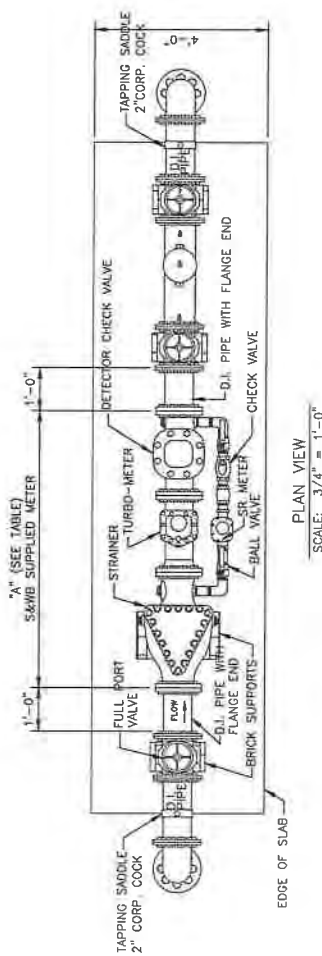
SEWERAGE AND WATER BOARD  
 OF NEW ORLEANS

VERTICAL CATCH BASIN  
 TWO PIECE GRATE, FRAME AND COVER  
 - DUCTILE IRON

DRG. NO. 8292-D

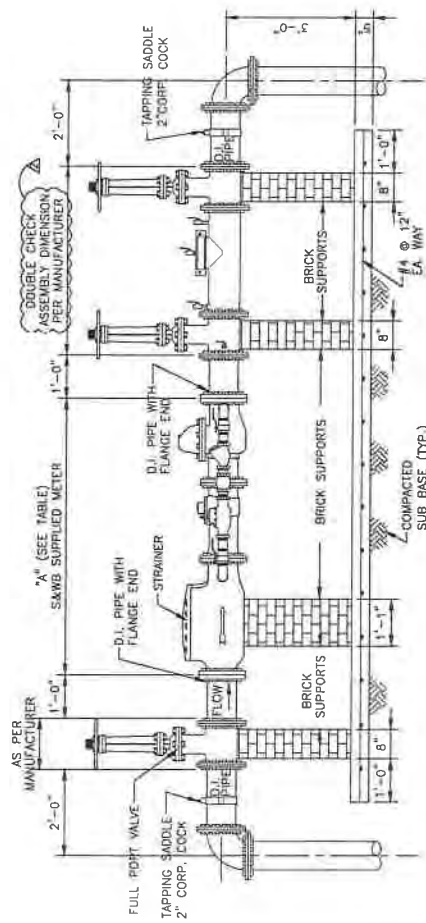






PLAN VIEW  
SCALE: 3/4" = 1'-0"

S&WB SUPPLIED TURBO METER	"A" DIMENSION IN INCHES	BADGERMETER INC.
4"	52"	33"
6"	68"	45"
8"	77"	53"
10"	90"	68"



LONGITUDINAL SECTION  
SCALE: 3/4" = 1'-0"

NOTES:

1. THE METER SHALL BE INSTALLED AS RECEIVED FROM THE S&WB METER DEPARTMENT AND MAY NOT BE MODIFIED IN ANY MANNER.
2. THE METER LOCATION SHALL NOT EXCEED 15' INSIDE THE PROPERTY LINE.
3. BACKFLOW PREVENTERS MUST BE LISTED AND CERTIFIED IN ACCORDANCE WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC) FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.
4. QUANTITIES TO BE VERIFIED, WHICH TYPE OF METER DEPARTMENT.

REV	DATE	DESCRIPTION	BY	CHK
1	04/29/73	GENERAL REVISION		EMC
2	05/02/73	GENERAL REVISION		EMC
3	01/26/77	REVISED "A" DIMENSION IN INCHES FOR 10" TURBO METER		EMC

SEWERAGE AND WATER BOARD  
OF NEW ORLEANS

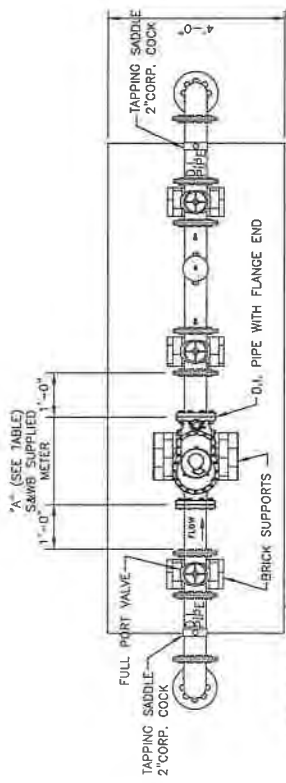
FIRE AND DOMESTIC

ABOVE GROUND ASSEMBLY DETAIL

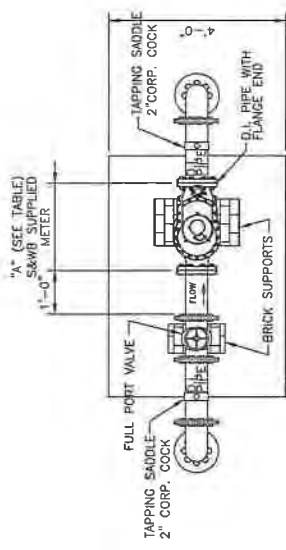
DATE: 11/11/73  
BY: J. ANHOLD  
CHECKED: AS NOTED  
DWG. NO. 8353-W1  
PROJECT NO.





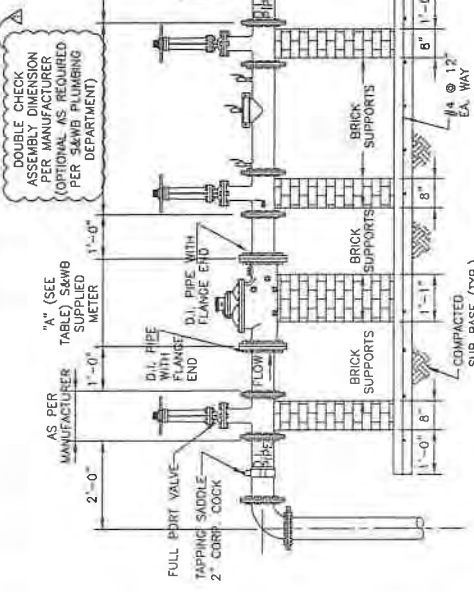


PLAN VIEW  
SCALE: 3/4" = 1'-0"

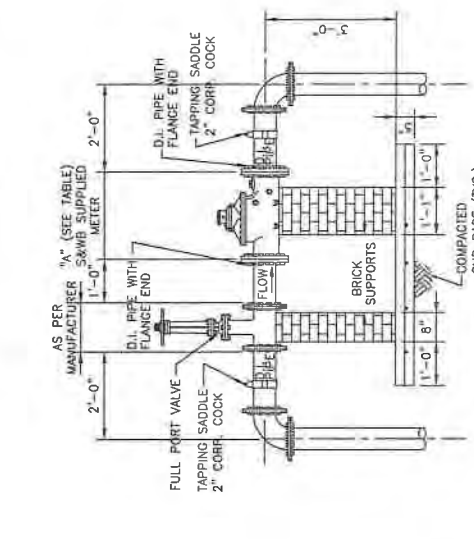


PLAN VIEW  
SCALE: 3/4" = 1'-0"

DOMESTIC ONLY	
SAWB SUPPLIED COMPOUND METER	"A" DIMENSION IN INCHES
4"	20"
6"	24"



LONGITUDINAL SECTION WITH DOUBLE CHECK ASSEMBLY  
SCALE: 3/4" = 1'-0"



LONGITUDINAL SECTION WITHOUT DOUBLE CHECK ASSEMBLY  
SCALE: 3/4" = 1'-0"

NOTES:

1. THE METER SHALL BE INSTALLED AS RECEIVED FROM THE SAWB METER DEPARTMENT AND MAY NOT BE MODIFIED IN ANY MANNER.
2. THE METER LOCATION SHALL NOT EXCEED 15' INSIDE THE PROPERTY LINE.
3. BACKFLOW PREVENTERS MUST BE LISTED AND CERTIFIED IN ACCORDANCE WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC) FOUNDATION HYDRAULIC RESEARCH CONTROL AND RESEARCH.

REV.	DATE	GENERAL REVISIONS	REVISIONS	BY
A	12/20/13			

SEWERAGE AND WATER BOARD  
OF NEW ORLEANS

DOMESTIC ONLY

ABOVE GROUND ASSEMBLY DETAIL

DATE	D. MURPHY
BY	J. ANNOVA
SCALE	AS NOTED
DWG. NO.	8353-W3
SHEET NO.	1



## I. GENERAL

1. IT IS TO BE UNDERSTOOD THAT ALL REFERENCES TO "THE SEWERAGE AND WATER BOARD (S&WB) ENGINEER" THROUGHOUT THIS DOCUMENT SHALL REFER TO THE GENERAL SUPERINTENDENT OF THE S&WB OR HIS APPOINTED REPRESENTATIVE AND ALL REFERENCES TO "THE S&WB INSPECTOR" THROUGHOUT THIS DOCUMENT SHALL REFER TO THE INSPECTOR ASSIGNED TO THE PROJECT BY THE S&WB ENGINEER. THE S&WB INSPECTOR SHALL REPRESENT THE S&WB ENGINEER IN HIS/HER ABSENCE. IT IS ALSO TO BE UNDERSTOOD THAT ALL REFERENCES TO S&WB DRAWINGS AND SPECIFICATIONS REFER TO THE LATEST EDITION OR REVISION.

2. THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS AND EQUIPMENT REQUIRED FOR THE INSTALLATION OF NEW WATER MAINS, VALVES, MANHOLES, HYDRANTS AND HOUSE CONNECTIONS REQUIRED BY THE PROJECT DRAWINGS AND SPECIFICATIONS.

3. THE S&WB WORK FORCE SHALL BE RESPONSIBLE FOR THE CLOSURE OF ALL WATER VALVES. THE CONTRACTOR SHALL CONTACT THE NETWORKS ADMINISTRATION AT 2900 PEOPLES AVE., N.O. LA 70122, TWO WEEKS IN ADVANCE OF ANY REQUIRED WATER CLOSURES.

4. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE GENERAL SPECIFICATIONS OF THE S&WB. ANY MODIFICATION FROM THE DESIGN DRAWINGS PERTAINING TO S&WB FACILITIES MUST BE APPROVED BY THE S&WB ENGINEER PRIOR TO CONSTRUCTION.

5. ELEVATIONS SHOWN ON THE DRAWINGS MAY REFER TO NAVD 88 OR TO CARBO DATUM. IF THE NOTED ELEVATIONS REFERENCE THE CARBO DATUM, 0.00 FT. NGVD 29 EQUALS 29.43 FT. CARBO DATUM.

6. IT IS TO BE UNDERSTOOD THAT WHEREVER SAND IS STIPULATED IN THE SPECIFICATIONS OR DRAWINGS, IT SHALL REFER TO PUMPED MISSISSIPPI RIVER SAND OR ANY NATURAL SAND DEPOSIT MEETING THE REQUIREMENTS OF AASHTO A-3 OR ASTM-SP.

7. THE CONTRACTOR SHALL NOTIFY THE GENERAL SUPERINTENDENT (625 ST. JOSEPH ST., N.O. LA 70165), WITH COPIES TO THE CHIEF OF ENGINEERING (8800 S. CLAIRBORNE AVE., N.O. LA 70118), AND THE CHIEF OF CONSTRUCTION ADMINISTRATION AND INSPECTION (8800 S. CLAIRBORNE AVE., N.O. LA 70118) OF THE S&WB IN WRITING NOT LESS THAN THREE (3), NOR MORE THAN TEN (10) DAYS IN ADVANCE OF STARTING THE PROJECT SO AS TO SCHEDULE THE INSPECTION OF ANY S&WB WORK. IF THE CONTRACTOR FAILS TO DO SO PRIOR TO STARTING HIS WORK, THE CONTRACTOR SHALL BE REQUIRED TO EXPOSE THE BEDDING ON ALL PIPES OR ANY OTHER CONCEALED WORK PREVIOUSLY INSTALLED IN ORDER TO OBTAIN THE APPROVAL OF THE S&WB INSPECTOR. ANY WORK PERFORMED WITHOUT A S&WB INSPECTOR'S APPROVAL WILL NOT BE ACCEPTED BY THE S&WB, NOR TIED INTO THE S&WB'S DISTRIBUTION SYSTEM.

8. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE DRAWINGS SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF ALL EXISTING STRUCTURE INVERTS AND THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF WORK, AND SHALL BE RESPONSIBLE FOR ANY NEGLIGENCE ON HIS PART IN PROTECTING THEM. THE LOCATION OF SEWER AND WATER HOUSE CONNECTIONS CAN BE OBTAINED FROM THE S&WB.

9. ALL S&WB MAINTAINED WATER FACILITIES INSTALLED BY THE CONTRACTOR WILL BE SUBJECT TO THE APPROVAL OF THE S&WB INSPECTOR. THE CONTRACTOR SHALL PROVIDE THE S&WB INSPECTOR FULL ACCESS TO THE WORK THROUGHOUT CONSTRUCTION AND ABIDE BY ANY JUSTIFIABLE S&WB INSPECTOR'S REQUEST TO EXPOSE ANY AND ALL WORK INSTALLED BY THE CONTRACTOR.

10. BACKFILL MATERIAL FOR ALL UTILITIES SHALL BE SAND COMPACTED MECHANICALLY IN 12 IN. LIFTS. COMPACTON SHALL BE PERFORMED TO 95% MAXIMUM DRY DENSITY, NEAR OPTIMUM WATER CONTENT, AND SHALL MEET THE COMPACTON CHARACTERISTICS OF ASTM D-157.

11. ALL REMOVED VALVES AND HYDRANTS AT 2900 PEOPLES AVE.

12. THE INSTALLATION OF THE WATER MAINS CLOSER TO A SEWER SHALL BE DESIGNED TO BE LAID IN A SEPARATE TRENCH LOCATED ON THE ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE GRAVITY SEWER.

## II. PIPE MATERIAL

ALL PIPE, PIPE FITTING, CONNECTORS, CORPORATION STOPS AND APPURTENANCES SHALL BE OF DOMESTIC MANUFACTURE, SHALL BE MADE OF LEAD FREE MATERIAL AND MEET ALL REQUIREMENTS OF AWWA, ASTM AND ANSI FOR USE IN POTABLE WATER DISTRIBUTION SYSTEMS.

## A. POLYVINYL CHLORIDE (PVC)

1. ALL NEW WATER MAINS 6 IN. THROUGH 12 IN. SHALL BE SOLID WALL DR. 18 PVC PIPE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900 "POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FABRICATED FITTINGS, 4 IN. THROUGH 12 IN. FOR WATER DISTRIBUTION." NEW WATER MAINS 16 IN. THROUGH 36 IN. SHALL BE SOLID WALL DR. 18 PVC PIPE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C905 "POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FABRICATED FITTINGS, 14 IN. THROUGH 48 IN. FOR WATER TRANSMISSION AND DISTRIBUTION." PIPE SHALL BE FURNISHED IN STANDARD LENGTHS (MIN. 16 FT.) WITH INTEGRAL CAST BELLS OR COUPLINGS USING ELASTOMERIC GASKETS CONFORMING TO AWWA STANDARD C900, OR TO ASTM D3139 OR F477.

2. FOR PVC WATER LINES, ALL PIPE FITTINGS SHALL BE DUCTILE IRON AND SHALL CONFORM TO THE FOLLOWING SECTION ON "DUCTILE IRON". ALL NUTS, BOLTS AND WASHERS SHALL BE MANUFACTURED OF 304 STAINLESS STEEL.

## B. DUCTILE IRON

1. DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C150. "THICKNESS DESIGN OF DUCTILE-IRON PIPE" AND AWWA STANDARD C151. "DUCTILE IRON PIPE, CENTRIFUGALLY CAST, FOR WATER," SPECIAL THICKNESS CLASS 52. DUCTILE IRON PIPE FOR ABOVE GROUND EXPOSED APPLICATIONS SUCH AS CANAL CROSSINGS OR INSIDE OF AN UNDERGROUND DRAINAGE BOX CANAL SHALL BE SPECIAL THICKNESS CLASS 56. NO JOINTS WILL BE ALLOWED INSIDE THE BOX CANAL.

2. DUCTILE IRON FITTINGS SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C110. "DUCTILE-IRON AND GRAY-IRON FITTING FOR WATER" OR C153. "DUCTILE-IRON COMPACT FITTING", FOR WATER SERVICE, 3 IN. THROUGH 24 IN. AND 54 IN. THROUGH 64 IN.

3. ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE AN ASPHALTIC COATING IN ACCORDANCE WITH AWWA STANDARDS C151 AND C110. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE INSTALLED IN A POLYETHYLENE ENCASMENT, 8 MILS IN THICKNESS, IN ACCORDANCE WITH AWWA STANDARD C105. "POLYETHYLENE ENCASMENT FOR DUCTILE IRON PIPE SYSTEMS". THIS POLYETHYLENE ENCASMENT SHALL COVER ALL DUCTILE IRON PIPE AND FITTINGS, INCLUDING JOINTS, AND SHALL BE OVERLAPPED A MINIMUM OF 12 IN. BETWEEN SECTIONS AND SEALED WITH BLACK POLYETHYLENE TAPE.

4. DUCTILE IRON PIPE AND FITTINGS SHALL BE LINED WITH CEMENT MORTAR, IN COMPLIANCE WITH AWWA STANDARD C104. "CEMENT-MORTAR LINING FOR DUCTILE-IRON PIPE AND FITTING FOR WATER".

5. JOINTS FOR DUCTILE IRON PIPE AND FITTINGS FOR BELOW GROUND APPLICATIONS SHALL BE PUSH-ON TYPE OR MECHANICAL JOINTS WITH RUBBER GASKETS IN ACCORDANCE WITH AWWA STANDARD C111. "RUBBER GASKET JOINTS FOR DUCTILE IRON PRESSURE PIPE AND FITTINGS". JOINTS FOR DUCTILE IRON PIPE AND FITTINGS FOR ABOVE GROUND EXPOSED APPLICATIONS, SUCH AS CANAL CROSSINGS, SHALL BE AMERICAN "FLEX-RING" OR U.S. PIPE "TR-FLEX" OR APPROVED EQUAL. (U.S. PIPE "FIELD LOK 350 GASKET" AND AMERICAN "FAST-FRIP GASKET" ARE NOT ALLOWED). ANY REQUIRED DUCTILE IRON FLANGES SHALL BE IN ACCORDANCE WITH AWWA STANDARD C115. "FLANGED DUCTILE IRON PIPE WITH DUCTILE IRON OR GRAY IRON THREADED FLANGES". STAINLESS STEEL BOLTS AND NUTS SHALL BE USED ON BOLTED FITTINGS, VALVES, SADDLES, ETC. ALL JOINTS SHALL BE RETRAINED PER MANUFACTURERS RECOMMENDATIONS.

## C. OTHER MATERIALS

STEEL, FIBERGLASS REINFORCED PIPE (FRP), AND HIGH DENSITY POLYETHYLENE (HDPE) ARE MATERIALS THAT HAVE BEEN APPROVED FOR INSTALLATION WITHIN THE WATER SYSTEM. THE SPECIFICATIONS FOR THESE MATERIALS WILL BE JOB SPECIFIC.

## III. WATER MAIN INSTALLATION

1. THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH FROM ALL OTHER UTILITIES. THE MINIMUM ALLOWABLE HORIZONTAL DISTANCE BETWEEN THE WATER MAIN, SEWER MAIN AND THE DRAIN LINE SHALL BE 6 FT., OD TO OD, AND A MINIMUM VERTICAL SEPARATION OF 18 IN., OD TO OD, AS STIPULATED IN LOUISIANA ADMINISTRATIVE CODE TITLE FIFTY-ONE (51) PUBLIC HEALTH-SANITARY CODE PART XII WATER SUPPLIES. THE MINIMUM ALLOWABLE HORIZONTAL DISTANCE BETWEEN THE WATER MAIN AND ALL OTHER UTILITIES SHALL BE 3 FT. AND A MINIMUM VERTICAL CLEARANCE OF 6 IN. ABOVE AND 12 IN. BELOW OTHER UTILITIES. IN INSTANCES WHERE A NEW WATER MAIN IS REPLACING AN EXISTING, THE NEW MAIN MUST BE KEPT IN SERVICE UNTIL THE NEW MAIN IS TIED IN. THE MINIMUM COVER FOR A WATER MAIN IS AT 3.5 FT. ALL DIMENSIONS BETWEEN UTILITIES SHALL BE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.

2. THE CURVATURE OF THE WATER MAINS IN CUL-DE-SACS MAY BE ACCOMPLISHED WITH POLYETHYLENE PE 3406 OR PE 3408 TUBING MATERIAL WITH LEAD FREE BRASS FITTINGS, USUALLY A 2 IN. MINIMUM DIAMETER LINE.

3. THE INSTALLATION OF ALL PIPE SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATIONS AND THE APPLICABLE REQUIREMENTS OF SECTION F OF THE S&WB GENERAL SPECIFICATIONS. THE TRENCH BOTTOM SHALL BE SMOOTH AND FREE FROM ROOTS, ROCKS, ETC. THE PIPE SHALL BE LAID ON A 6 IN. BED OF SAND FOR THE FULL WIDTH OF THE TRENCH AND COMPACTED TO 95% STANDARD PROCTOR DENSITY AT OR NEAR THE OPTIMUM MOISTURE CONTENT. THE SAND SHALL BE PLACED AND CONSOLIDATED UNDER THE PIPE HAUNCHES TO PROVIDE ADEQUATE SIDE SUPPORT TO THE PIPE AVOIDING DISPLACEMENT AND MISALIGNMENT. THE REMAINDER OF THE TRENCH SHALL BE FILLED WITH SAND IN 12" LIFTS AND COMPACTED TO 95% OPTIMUM DENSITY AND UP TO THE SPECIFIED GRADE AS REQUIRED BY THE S&WB GENERAL SPECIFICATIONS.

4. LUBRICANT FOR GASKETED PIPE AND FITTINGS SHALL BE SUITABLE FOR POTABLE WATER SYSTEMS AND SHALL CONFORM TO AND BE CERTIFIED BY BOTH OF THE FOLLOWING STANDARDS:  
A. ANSISNF 14: PLASTIC PIPING SYSTEMS COMPONENTS AND RELATED MATERIALS.  
B. ANSISNF 61: DRINKING WATER SYSTEM COMPONENTS - HEALTH EFFECTS. THE USE OF OLEATE-BASED LUBRICANTS IS NOT PERMITTED FOR NEW WATER MAIN INSTALLATIONS DUE TO ODOR, AND TASTE TRANSFER PROBLEMS.

5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CLEANLINESS OF THE MAIN UNTIL COMPLETION OF THE WORK AND FINAL ACCEPTANCE OF THE CONTRACT. AT THE END OF EACH DAY'S WORK, OR STOPPAGE OF WORK, THE CONTRACTOR MUST PROVIDE AN APPROVED TEMPORARY WATERTIGHT PLUG AT EACH OPEN END. WHEN WORK IS RESUMED, THE TRENCH MUST BE FREE OF WATER AND DIRT BEFORE THE PLUG IS REMOVED.

6. THE CONTRACTOR SHALL MAKE ALL TIE-INS AND SHALL PROVIDE ALL MATERIAL FOR TIE-INS AS SPECIFIED IN THE CONTRACT DRAWINGS. THE TIE-IN SHALL BE CONFIGURED IN SUCH A MANNER TO REQUIRE 18 LINEAR FEET OF PIPE OR LESS. THE S&WB DOES NOT ALLOW INSTALLATION OF PIPE RUNS GREATER THAN 18 LINEAR

FEET WITHOUT HYDROSTATIC PRESSURE TESTING AND CHLORINATION. ALL PIPE USED IN THE TIE-IN SHALL BE THOROUGHLY CLEANED AND SWABBED WITH A 1-5 PERCENT HYPOCHLORITE DISINFECTING SOLUTION JUST PRIOR TO BEING INSTALLED, AS RECOMMENDED BY AWWA C651. TIE-INS SHALL ONLY BE MADE ONCE THE CHLORINATION PROCESS HAS BEEN APPROVED.

7. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE S&WB PRIOR TO MAKING TIE-INS, AND SHALL WORK CONTINUOUSLY UNTIL COMPLETION ON ALL TIE-INS AND WATER SERVICES ARE RESTORED. WATER SERVICE WILL NOT BE INTERRUPTED UNTIL ALL CREWS AND EQUIPMENT ARE ON SITE WITH THE CONNECTION EXPOSED, AND PREPARED TO BEGIN THE TIE-IN. IN ADDITION, THE CONTRACTOR MUST SHOW THAT THE N.O. FIRE DEPT. AND AFFECTED RESIDENTS HAVE BEEN NOTIFIED 24 HOURS IN ADVANCE OF ANY INTERRUPTION OF SERVICE. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO LIMIT RESIDENTIAL CLOSURES.

8. PRIOR TO THE INSTALLATION OF S&WB FACILITIES, THE ENTIRE AREA WITHIN THE PUBLIC RIGHT-OF-WAY, INCLUDING THE ENTIRE WIDTH OF ANY SERVITUDE ADJACENT TO THE FRONT PROPERTY LINE, PLUS AN ADDITIONAL 3 FT. MUST BE FILLED TO THE FINISHED GRADE.

## IV. METER MANHOLES, VAULTS & BOXES

1. WHERE MANHOLES OR VAULTS ARE REQUIRED WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND CONSTRUCTION OF THE METER MANHOLE OR VAULT IN ACCORDANCE WITH THE S&WB GENERAL SPECIFICATIONS SECTION F-12. METER SIZES 1 IN. AND SMALLER SHALL BE INSTALLED WITHIN THE PUBLIC RIGHT-OF-WAY IN A METER BOX AS SHOWN ON S&WB DWG. NO. 7134-W. METER SIZES 1 1/2 IN. AND 2 IN. INSTALLED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE INSTALLED IN MANHOLES AS SHOWN ON S&WB DWG. NO. 7332-W. METER SIZES 4 IN. TO 12 IN. INSTALLED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE INSTALLED IN VAULTS AS SHOWN ON S&WB DWG. NO. 7531-W.

2. ALL MANHOLE FOUNDATION SLABS SHALL BE PLACED ON A 6 IN. LAYER OF CRUSHED STONE OR APPROVED EQUAL BEDDING MATERIAL. PRECAST VALVE MANHOLES REQUIRE APPROVAL BY SWB ENGINEERING PRIOR TO INSTALLATIONS.

3. METER BOXES SHALL BE ADJUSTED TO FINAL GRADE WITH NO SEPARATION BETWEEN THE BARREL AND LOWER METER PAN. NO ADJUSTMENT RINGS ARE ALLOWED.

## V. HOUSE CONNECTIONS

1. **WATER HOUSE CONNECTIONS SHALL BE INSTALLED AT THE CENTER OF EACH LOT UNLESS OTHERWISE APPROVED BY THE S&WB ENGINEER. FOR NEW CONSTRUCTION, THE LOCATION OF ALL WATER HOUSE CONNECTIONS SHALL BE IMPRINTED ON THE CURB WITH THE LETTER "W" NOT LESS THAN 3 IN. HIGH AND 1/4 IN. DEEP. SIZE OF TAP, CORPORATION COCK AND POLYETHYLENE PIPE SHALL BE 1 INCH FOR 5/8 IN. TO 1 IN. METERS AS SHOWN ON S&WB DWG. NO. 7134-W**

2. WHEN THE WATER MAIN IS LOCATED OUTSIDE OF THE ROADWAY AND SERVICE CONNECTIONS ARE REQUIRED ON THE OPPOSITE SIDE OF THE STREET, THE CONTRACTOR SHALL FURNISH AND INSTALL PVC CONDUIT PIPE (MIN. 0216 IN. WALL THICKNESS, MIN. 3 IN. DIAMETER) WITH ENDS TEMPORARILY SEALED.

3. ALL BRONZE/BRASS FITTINGS, CONNECTORS, CORPORATION STOPS AND APPURTENANCES SHALL BE OF DOMESTIC MANUFACTURE, SHALL BE MADE OF LEAD FREE BRONZE/BRASS, AND MEET ALL REQUIREMENTS OF AWWA, ASTM AND ANSI FOR USE IN THE POTABLE WATER DISTRIBUTION SYSTEMS.

4. NO DIRECT TAPPING OF THE PIPE WILL BE PERMITTED FOR MAKING HOUSE CONNECTIONS. SERVICE SADDLES SHALL BE BRONZE CLOW NO. 3407 G. J. JONES F-996, MUELLER SERIES H-13400, 590 FORD BRASS SADDLE OR FORD FC202. THE CONTRACTOR SHALL USE ONLY SHELL TYPE HOLE CUTTERS THAT WILL RETAIN THE COUPON.

## VI. METERS

1. REQUIRED METERS WILL BE FURNISHED BY THE S&WB AT NO ADDITIONAL COST TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND CONSTRUCTION OF THE METER BOX, AND METER MANHOLE OR VAULT.

2. THE METER SHALL BE INSTALLED AS RECEIVED FROM THE S&WB METER DEPARTMENT AND MAY NOT BE MODIFIED IN ANY MANNER. ANY MODIFICATIONS WILL VOID THE UL WARRANTY AND, AS SUCH, MAY SUBJECT THE OWNER TO FINANCIAL PENALTY AND LOSS OF SERVICE.

3. METERS INSTALLED ON PRIVATE PROPERTY SHALL BE INSTALLED AS SHOWN ON S&WB DWG. NO. 8553-W AND MEET THE REQUIREMENTS OF THE S&WB PLUMBING DEPARTMENT.

## VII. VALVES AND HYDRANTS

1. VALVES 4 IN. TO 12 IN. INSTALLED IN THE PUBLIC RIGHT-OF-WAY SHALL BE S&WB R.D. WOOD GATE VALVES AS SHOWN IN S&WB DWG. 11897-W-62 OR AMERICAN RD ROTATING GATE DISC VALVE C-500 WITH ADJUSTABLE PACKING. VALVES 16 IN. AND LARGER SHALL BE AMERICAN RD GATE VALVES. ALL VALVES MUST BE INSTALLED IN MANHOLES AND LOCATED AT THE PROJECTED PROPERTY LINE.

2. HYDRANTS SHALL BE 5 IN. BREAKAWAY FIRE HYDRANT BRONZE TRIM AS DETAILED IN S&WB DWG. NO. 11825-W-62, 5 1/4 IN. AMERICAN DARLING FIRE HYDRANT B-62-B, S&WB MUELLER HYDRANT A-473 AS DETAILED IN MUELLER DRAWING NO. FH 285 AND K81D GUARDIAN HYDRANT AS DETAILED IN KENNEDY VALVE DRAWING NO. 80783-NOLA.

3. HYDRANT LEADS SHALL BE 6 IN. SOLID WALL PVC PIPE CLASS 150, AWWA

STANDARD C-900. ALL HYDRANT LEAD JOINTS SHALL BE RETAINED. A 6 IN. VALVE WITH VALVE BOX SHALL BE INSTALLED ON ALL HYDRANT LEADS. HYDRANTS SHALL BE INSTALLED WITH WOOD BLOCKING AND BE SPACED NOT MORE THAN 350 FT. APART, 6 FT. OFF THE PROJECTED PROPERTY LINE ON CORNER LOTS AND WITHIN 5 FT. OF THE CENTER OF THE LOT FOR INTERIOR LOTS. FOR DETAILS OF SETTING HYDRANTS, SEE S&WB DWG. NO. 61794-F-2.

## VIII. TESTING, CHLORINATION AND FLUSHING

1. ALL NEW MAINS, VALVES, HYDRANTS AND SERVICES SHALL BE INSTALLED PRIOR TO PRESSURE TESTING. THE SYSTEM SHALL BE PRESSURE TESTED BY THE CONTRACTOR IN THE PRESENCE OF THE S&WB INSPECTOR AND IN ACCORDANCE WITH PARAGRAPH F-15 OF THE GENERAL SPECIFICATIONS. THE TEST SHALL BE SCHEDULED BY THE S&WB INSPECTOR. ALL AIR SHALL BE BLED FROM THE SYSTEM PRIOR TO TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED AS A RESULT OF TEST FAILURES, INCLUDING REPAIRS TO DEFECTS.

2. ALL NEW AND/OR MODIFIED SEGMENTS OF THE WATER DISTRIBUTION SYSTEM SHALL BE TESTED TO 100 P.S.I. THIS PRESSURE SHALL BE MAINTAINED FOR A MINIMUM PERIOD OF TWO (2) HOURS WITH NO PRESSURE LOSS. LEAKS SHALL BE REPAIRED BY REMOVING AND REPLACING FAULTY SECTIONS. THE PRESSURE TEST SHALL BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECT SUPERVISION OF THE ENGINEERING DEPARTMENT.

3. BEFORE BEING PLACED IN SERVICE, ALL NEW, MODIFIED AND/OR CONTAMINATED SEGMENTS OF THE WATER DISTRIBUTION SYSTEM SHALL BE FLUSHED AND DISINFECTED (CHLORINATED) BY THE CONTRACTOR UNDER THE DIRECT SUPERVISION OF AND TO THE SATISFACTION OF THE S&WB ENGINEER. FLUSHING SHOULD BE DONE AT FLOW RATES SUFFICIENT TO PROVIDE A VELOCITY IN THE LINES OF AT LEAST 2.5 FEET PER SECOND. DISINFECTION SHOULD COMPLY WITH AWWA STANDARD C61. "DISINFECTING WATER MAINS". ONLY AFTER SATISFACTORY PRESSURE TESTING AND DISINFECTION (CHLORINATION) IS COMPLETED CAN THE SEGMENT BE TIED INTO THE EXISTING WATER DISTRIBUTION SYSTEM. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE ALLOWED TO MAKE A TIE-IN TO THE EXISTING WATER DISTRIBUTION SYSTEM WITHOUT DIRECT SUPERVISION OF THE ENGINEERING DEPARTMENT. ALL COSTS ASSOCIATED WITH THE TESTING, FLUSHING AND CHLORINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. THE CONTRACTOR SHALL CHLORINATE THE NEW WATER MAIN SYSTEM, INCLUDING FIRE HYDRANTS, FIRE HYDRANT LEADS, VALVES AND SERVICE CONNECTIONS, UNDER THE DIRECT SUPERVISION OF THE S&WB, SUCH THAT THE MINIMUM CHLORINE CONCENTRATION THROUGHOUT THE SYSTEM IS 50 MG/L. THE CHLORINATED WATER SHALL BE RETAINED IN THE PIPE FOR 24 HOURS FOR WATER MAINS LESS THAN 30 INCHES IN DIAMETER, AND FOR 48 HOURS FOR WATER MAINS GREATER THAN OR EQUAL TO 30 INCHES IN DIAMETER. AFTER THE REQUIRED RETENTION TIME, THE CHLORINATED RESIDUAL SHALL BE AT LEAST 5 MG/L FREE CHLORINE, AS MEASURED BY THE S&WB. IF THE RESIDUAL IS LESS THAN 5 MG/L AT ANY POINT IN THE SYSTEM, THE INITIAL FLUSHING AND DISINFECTION PROCEDURE SHALL BE REPEATED BY THE CONTRACTOR UNTIL A 5 MG/L FREE CHLORINE RESIDUAL IS OBTAINED. THE CONTRACTOR SHALL CONTACT THE S&WB WATER PURIFICATION DEPARTMENT (504) 865-0574. A MINIMUM OF 48 HOURS PRIOR TO CHLORINATING THE NEW MAIN TO SCHEDULE THE SAMPLE COLLECTION.

5. THE NEW MAIN MUST BE CONNECTED TO THE S&WB'S SYSTEM WITHIN 72 HOURS OF NOTIFICATION OF PASSING THE CHLORINATION TEST. FAILURE TO COMPLETE THE TIE-INS WITHIN THIS TIME LIMITATION WILL RESULT IN RETESTING THE NEW MAIN AT THE EXPENSE OF THE CONTRACTOR.

## IX. INSPECTION

1. ALL INSTALLATION OF WATER MAINS AND RELATED APPURTENANCES WILL BE PERFORMED UNDER THE INSPECTION OF, AND TO THE SATISFACTION OF THE S&WB INSPECTOR THROUGHOUT THE COURSE OF THE WORK.

## X. FINAL ACCEPTANCE

1. THE NEW WATER MAINS AND APPURTENANCES MUST BE INSTALLED LEVEL, AT PROPER GRADE, HAVE PASSED ALL REQUIRED TESTS, AND CONNECTED TO THE EXISTING WATER SYSTEM PRIOR TO OBTAINING FINAL ACCEPTANCE.

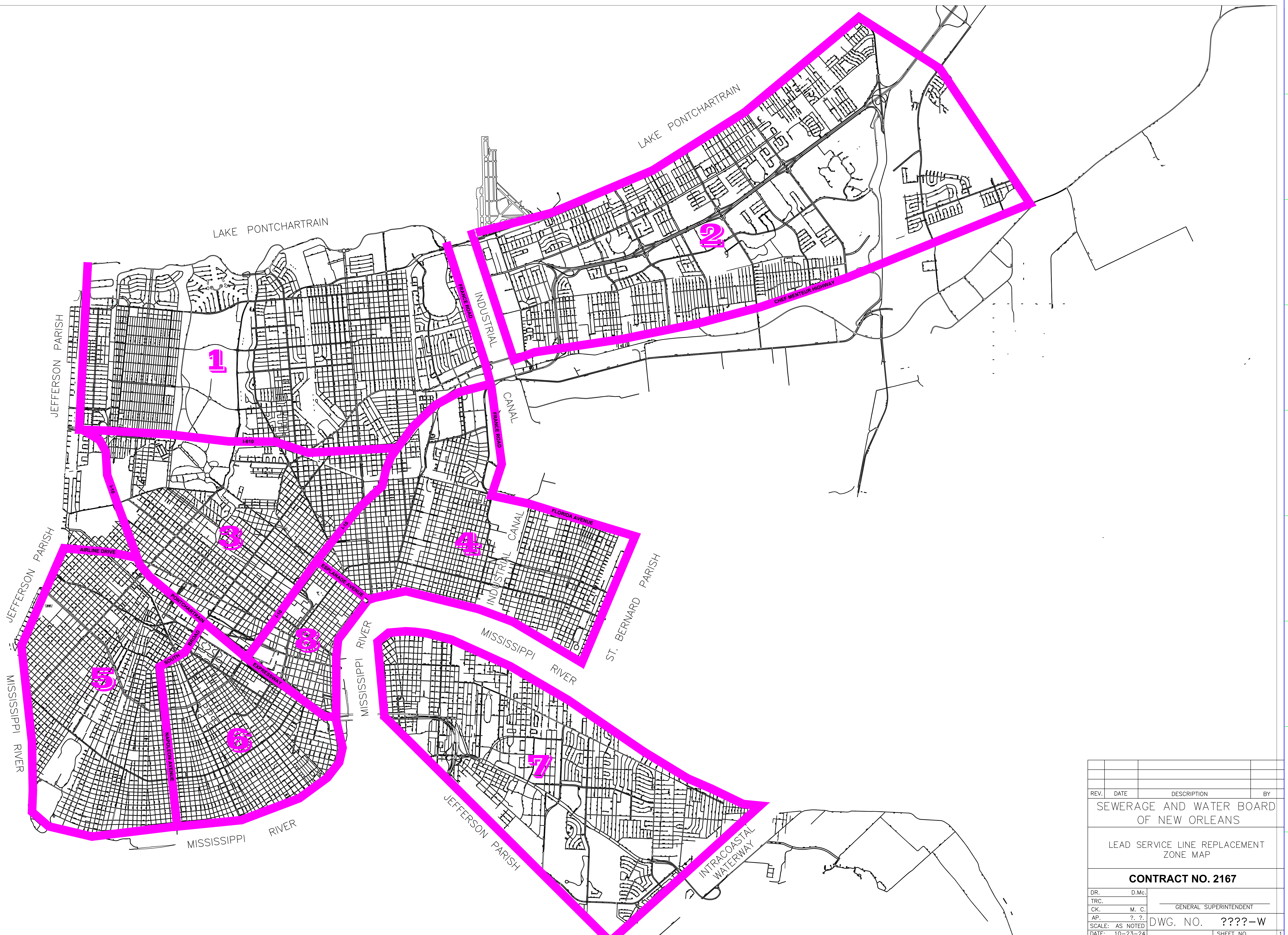
2. BEFORE FINAL INSPECTION OF THE SYSTEM, THE CONTRACTOR SHALL SUBMIT AN "AS-BUILT" DRAWING TO THE S&WB SHOWING THE WATER LINE LOCATION AND THE LOCATION OF ALL HOUSE CONNECTIONS, IN ACCORDANCE WITH S&WB REQUIREMENTS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO CERTIFY THAT THE "AS-BUILT" DRAWINGS ARE CORRECT. ANY INACCURACY AS DETERMINED BY THE S&WB IN THE "AS-BUILT" DRAWINGS SHALL BE CORRECTED AT THE COST OF THE CONTRACTOR.

3. THE CONTRACTOR MUST CONTACT THE S&WB TO SET A DATE FOR FINAL INSPECTION. IN THE EVENT THE CONTRACTOR CALLS FOR AN INSPECTION AND THE WORK IS NOT ADEQUATELY COMPLETE, A NEW INSPECTION DATE WILL THEN BE SET AT THE DISCRETION OF THE S&WB INSPECTOR.

4. FINAL ACCEPTANCE OF THE SYSTEM WILL BE SUBJECT TO A ONE (1) YEAR MAINTENANCE PERIOD.

REV.	DATE	DESCRIPTION	BY
<b>SEWERAGE AND WATER BOARD OF NEW ORLEANS</b>			
SPECIFICATIONS FOR INSTALLATION OF WATER MAINS			
DR.	D. MC.		
TRC.	M. M.		
CK.	R. S.		
AP.	NONE		
SCALE			
DATE	10-03-19		
DWG. NO.	7260-W		
SHEET NO.	2		





REV.	DATE	DESCRIPTION	BY
SEWERAGE AND WATER BOARD OF NEW ORLEANS			
LEAD SERVICE LINE REPLACEMENT ZONE MAP			
<b>CONTRACT NO. 2167</b>			
DR.	D.Mc.	GENERAL SUPERINTENDENT	
TRC.			
CK.	M. C.		
AP.	?. ?.	DWG. NO. ???-W	
SCALE:	AS NOTED		
DATE:	10-23-24	SHEET NO. 1	



# LIST OF SCHOOLS PER ZONE

Early Childcare Centers   Public Schools   Private Schools

Zone	Address
1	127 Elk Pl, New Orleans LA 70112
1	1722 Sere St., New Orleans LA 70122
1	2700 Lavender St, New Orleans LA 70122
1	2710 Gentilly Blvd, New Orleans LA 70122
1	3001 Annette Street, New Orleans LA 70122
1	3520 Frenchmen St, New Orleans LA 70122
1	3663 Franklin Ave., New Orleans LA 70122
1	420 Robert E. Lee Boulevard, New Orleans LA 70124
1	5290 Canal Blvd, New Orleans LA 70124
1	5915 Louis XIV St, New Orleans LA 70124
1	6117 Franklin Ave., New Orleans LA 70122
1	6210 Franklin Ave, New Orleans LA 70122
1	6257 General Diaz St, New Orleans LA 70124
1	6317 Argonne Blvd., New Orleans LA 70124
1	1456 Gardena Dr, New Orleans, LA 70122
1	1901 Leon C Simon Dr New Orleans, LA 70122
1	2001 Leon C Simon Dr New Orleans, LA 70122
1	2401 Humanity St New Orleans, LA 70122
1	2529 Drexel Ave, New Orleans, LA 70122
1	2916 Paris Ave, New Orleans, US
1	3774 Gentilly Blvd New Orleans, LA 70122
1	3801 St Bernard Ave, New Orleans, LA 70122
1	4000 Cadillac St New Orleans, LA 70122
1	4200 Marigny St New Orleans, LA 70122
1	4223 Elysian Fields Ave New Orleans, LA 70122
1	4720 Painters St New Orleans, LA 70122
1	5800 St Roch Ave New Orleans, LA 70122
1	6026 Paris Ave New Orleans, LA 70122
1	6601 Franklin Ave, New Orleans, LA 70122
1	6701 Press Dr New Orleans, LA 70122
1	990 Harrison Ave, New Orleans, LA 70124
1	4401 Elysian Fields Ave, New Orleans, LA 70122
1	5500 Paris Ave, New Orleans, LA 70122
1	6249 Canal Blvd, New Orleans, LA 70124
1	6326 Memphis St, New Orleans, LA 70124
1	6600 Spanish Fort Blvd, New Orleans, LA 70124
1	6645 Spanish Fort Blvd, New Orleans, LA 70124
1	7027 Milne Blvd, New Orleans, LA 70124
1	8 Friedrichs Ave New Orleans, LA 70124
1	9 Fortress Rd, New Orleans, LA 70122

Zone	Address
2	10120 Brookfield Dr, New Orleans LA 70127
2	13100 Laval St., New Orleans LA 70129
2	3638 Metropolitan St, New Orleans LA 70126
2	4148 Providence Place, New Orleans LA 70126
2	4447 Arthur Dr, New Orleans LA 70127
2	4606 Viola St, New Orleans LA 70126
2	4655 Michoud Blvd. Suite #17, New Orleans LA 70129
2	4734 Haydel Street, New Orleans LA 70126
2	4801 Gabriel Dr, New Orleans LA 70127
2	4818 Redwood Street, New Orleans LA 70127
2	4830 Marseille St, New Orleans LA 70129
2	4901 Chef Menteur Hwy Suite 8, New Orleans LA 70126
2	4948 Corinne Street, New Orleans LA 70127
2	5100 Willowbrook Dr, New Orleans LA 70129
2	5630 Crowder Blvd., New Orleans LA 70127
2	5731 Louis Prima Dr E, New Orleans LA 70128
2	5951 Bullard Ave, Suite 2, New Orleans LA 70128
2	6111 Craig Rd., New Orleans LA 70126
2	6931 COVENTRY STREET, New Orleans LA 70126
2	6993 Queensway Dr., New Orleans LA 70128
2	7060 Curran Rd., New Orleans LA 70126
2	7700 Lake Forest Blvd., New Orleans LA 70126
2	7721 Keats St., New Orleans LA 70126
2	7740 HENLEY STREET, New Orleans LA 70126
2	8447 Huntington Park Dr., New Orleans LA 70127
2	8802 Bunker Hill Rd., New Orleans LA 70127
2	9015 Morrison Rd, New Orleans LA 70127
2	10080 Morrison Rd, New Orleans, US
2	10200 Curran Blvd, New Orleans, LA 70127
2	10715 Morrison Rd New Orleans, LA 70127
2	11110 Lake Forest Blvd New Orleans, LA 70128
2	11120 Hayne Blvd New Orleans, LA 70128
2	11755 Dwyer Rd, New Orleans, LA 70128
2	12000 Hayne Blvd New Orleans, LA 70128
2	13435 Granville St New Orleans, LA 70129
2	14441 Curran Blvd New Orleans, LA 70128
2	2800 Desire Pkwy New Orleans, LA 70126
2	3059 Higgins Blvd New Orleans, LA 70126
2	3301 Higgins Blvd, New Orleans, LA 70126
2	3973 Downman Rd New Orleans, LA 70126
2	4335 Werner Dr New Orleans, LA 70126
2	4347 Reynes St New Orleans, LA 70126
2	4441 Old Gentilly Rd New Orleans, LA 70126
2	4715 Dodt Avenue New Orleans, LA 70126
2	4801 Maid Marion Dr New Orleans, LA 70128
2	5100 Cannes St, New Orleans, LA 70129
2	5316 Michoud Blvd New Orleans, LA 70129
2	5427 Crowder Blvd New Orleans, LA 70127
2	5552 Read Blvd, New Orleans, LA 70127
2	5615 Read Blvd New Orleans, LA 70127
2	6003 Bullard Ave Suite 16 New Orleans, LA 70128
2	6054 Hayne Blvd New Orleans, LA 70126
2	6234 Curran Blvd New Orleans, LA 70126
2	6519 Virgilian St New Orleans, LA 70126
2	6701 Curran Blvd, New Orleans, LA 70126
2	6828 Chef Menteur Hwy New Orleans, LA 70126
2	6836 Bundy Rd New Orleans, LA 70127
2	7016 Read Ln New Orleans, LA 70127
2	7163 Read Blvd New Orleans, LA 70127
2	7301 Dwyer Rd, New Orleans, LA 70126
2	7361 Read Blvd New Orleans, LA 70127
2	7653 Lacombe St New Orleans, LA 70127
2	7701 Grant St New Orleans, LA 70126
2	8250 I-10 Service Rd New Orleans, LA 70126
2	8400 Morrison Rd New Orleans, LA 70127
2	8550 Curran Blvd New Orleans, LA 70127
2	9290 Morrison Rd Ste B, 70127, New Orleans
2	9501 Grant St New Orleans, LA 70127
2	13123 I-10 Service Rd, New Orleans, LA 70128
2	4861 Rosalia Dr, New Orleans, LA 70127
2	5010 Piety Dr., New Orleans, LA 70126
2	6905 Chef Menteur Hwy New Orleans, LA 70126
2	7901 Crowder Blvd, New Orleans, LA 70127
2	8001 Lafourche St, New Orleans, LA 70127
2	8400 Hayne Blvd, New Orleans, LA 70127

Zone	Address
3	1140 Broad Street, New Orleans LA 70119
3	128 S. Jeff Davis Parkway, New Orleans LA 70119
3	1425 Iberville, New Orleans LA 70119
3	1546 North Broad, New Orleans LA 70119
3	2053 Hope St., New Orleans LA 70119
3	2224 Laharpe St, New Orleans LA 70119
3	2539 Columbus St., New Orleans LA 70119
3	2733 Bienville Street, New Orleans LA 70119
3	2913 Dumaine St, New Orleans LA 70119
3	329 South Dorgenois, New Orleans LA 70119
3	3408 Esplanade Ave., New Orleans LA 70119
3	4217 Orleans Ave., New Orleans LA 70119
3	4300 1/2 Saint Ann St., New Orleans LA 70119
3	4302 Canal St., New Orleans LA 70119
3	4601 Cleveland Avenue, New Orleans LA 70119
3	501 N. Galvez St., New Orleans LA 70119
3	139 S Broad St New Orleans, LA 70119
3	1678 N Broad St, New Orleans, LA 70119
3	211 S Lopez St, New Orleans, LA 70119
3	2240 A P Tureaud Ave, New Orleans, LA 70119
3	2300 Dumaine St New Orleans, LA 70119
3	2300 Lapeyrouse St New Orleans, LA 70119
3	2426 Esplanade Ave New Orleans, LA 70119
3	2733 Esplanade Ave New Orleans, LA 70119
3	2903 Tulane Ave New Orleans, LA 70119
3	3019 Canal St, New Orleans, LA 70119
3	3033 Paris Ave, New Orleans, LA 70119
3	3121 St Bernard Ave New Orleans, LA 70119
3	3368 Esplanade Ave New Orleans, LA 70119
3	3401 Canal St New Orleans, LA 70119
3	3519 Trafalgar St New Orleans, LA 70119
3	4407 S Carrollton Ave New Orleans, LA 70119
3	4621 Canal St New Orleans, LA 70119
3	615 City Park Ave New Orleans, LA 70119
3	1400 Moss St, New Orleans, LA 70119
3	1501 Abundance St New Orleans, LA 70119
3	1839 Agriculture St, New Orleans, LA 70119
3	1851 N Dorgenois St, New Orleans, LA 70119
3	2600 A P Tureaud Ave, New Orleans, LA 70119
3	3937 Canal St, New Orleans, LA 70119
3	4133 Banks St, New Orleans, LA 70119
3	4600 Canal St New Orleans, LA 70119

Zone	Address
4	1729 Piety St., New Orleans LA 70117
4	1922 URQUHART ST, New Orleans LA 70117
4	2027 Louisa St, New Orleans LA 70117
4	2120 Gordon St, New Orleans LA 70117
4	2269 N. Miro St., New Orleans LA 70117
4	2436 ST. ROCH AVENUE, New Orleans LA 70117
4	2624 Burgundy, New Orleans LA 70117
4	3000 Law St., New Orleans LA 70117
4	3716 N Tonti Street, New Orleans LA 70117
4	1230 Lamanche St New Orleans, LA 70117
4	1415 Franklin Ave New Orleans, LA 70117
4	1539 Bartholomew St, New Orleans, LA 70117
4	1617 Fats Domino Ave New Orleans, LA 70117
4	1633 Gallier St New Orleans, LA 70117
4	2001 Frenchmen St New Orleans, LA 70116
4	2225 Congress St New Orleans, LA 70117
4	2300 St Claude Ave New Orleans, LA 70117
4	3303 N Claiborne Ave New Orleans, LA 70117
4	3811 North Galvez New Orleans, LA 70117
4	3819 St Claude Ave New Orleans, LA 70117
4	3901 St Claude Ave, New Orleans, LA 70117
4	4121 St Claude Ave New Orleans, LA 70117
4	5300 N Rocheblave St New Orleans, LA 70117
4	6117 St Claude Ave, New Orleans, LA 70117

Zone	Address
5	1305 Broadway St, New Orleans LA 70118
5	1545 State St., New Orleans LA 70118
5	1820 Soniat Street, New Orleans LA 70115
5	2020 Calhoun St, New Orleans LA 70118
5	2717 Joliet Street, New Orleans LA 70118
5	3038 Broadway Street, New Orleans LA 70125
5	3524 Audubon Ct., New Orleans LA 70125
5	404 Fern St, New Orleans LA 70118
5	4505 S. Claiborne Avenue, New Orleans LA 70125
5	4605 Freret St, New Orleans LA 70115
5	5342 St. Charles Ave, New Orleans LA 70115
5	5401 South Claiborne, New Orleans LA 70125
5	624 Valance St., New Orleans LA 70115
5	719 S. Carrollton Ave, New Orleans LA 70118
5	7453 Garfield St, New Orleans LA 70118
5	7818 Earhart Blvd, New Orleans LA 70125
5	8008 Oak Street, New Orleans LA 70118
5	8540 Spruce Street, New Orleans LA 70118
5	1116 Jefferson Ave New Orleans, LA 70115
5	1333 S Carrollton Ave New Orleans, LA 70118
5	1402 South Jefferson Davis Parkway New Orleans, LA 70125
5	1426 Napoleon Ave, New Orleans, LA 70115
5	1607 S Carrollton Ave New Orleans, LA 70118
5	2319 Valence St New Orleans, LA 70115
5	2727 S Carrollton Ave New Orleans, LA 70118
5	3800 Eagle St New Orleans, LA 70118
5	4040 Eagle St, New Orleans, LA 70118
5	428 Broadway St, New Orleans, LA 70118
5	5624 Freret St New Orleans, LA 70115
5	5625 Loyola Ave New Orleans, LA 70115
5	5712 S Claiborne Ave, New Orleans, LA 70125
5	5951 Patton St New Orleans, LA 70115
5	7315 Willow St New Orleans, LA 70118
5	8326 Apricot St New Orleans, LA 70118
5	8819 S Claiborne Ave, New Orleans, LA 70118
5	9301 Colapissa St New Orleans, LA 70118
5	9330 Forshey St, New Orleans, LA 70118
5	1903 Jefferson Ave, New Orleans, LA 70115
5	2032 S Carrollton Ave New Orleans, LA 70118
5	2635 State St, New Orleans, LA 70118
5	4521 St Charles Ave New Orleans, LA 70115
5	5116 Magazine St, New Orleans, LA 70115
5	5300 St Charles Ave, New Orleans, LA 70115
5	6325 Cromwell Pl New Orleans, LA 70118
5	65 Fontainebleau Dr, New Orleans, LA 70125
5	7508 Burthe St, New Orleans, LA 70118
5	7701 Walmsley Ave, New Orleans, LA 70125
5	8012 Oak St New Orleans, LA 70118
5	919 Cambronne St, New Orleans, LA 70118

Zone	Address
6	1111 Milan St, New Orleans LA 70115
6	1200 Josephine Street, 1200 Josephine, New Orleans LA 70130
6	1501 Religious Street, New Orleans LA 70130
6	1538 Phillip St, New Orleans LA 70130
6	1803 Willow Street, New Orleans LA 70113
6	1924 Phillip St., New Orleans LA 70113
6	1962 Jackson Ave, New Orleans LA 70113
6	2010 Peniston Street, Suite 200, New Orleans LA 70115
6	2031 Marengo St, New Orleans LA 70115
6	2415 Washington Ave., New Orleans LA 70130
6	2424 Clara St, New Orleans LA 70113
6	2500 S. Broad St, New Orleans LA 70125
6	2608 Milan St., New Orleans LA 70115
6	2805 Martin Luther King Blvd., New Orleans LA 70113
6	2826 Martin Luther King Jr. Blvd, New Orleans LA 70113
6	305 Baronne St., Suite 302, New Orleans LA 70130
6	3121 Louisiana Ave Pkwy, New Orleans LA 70125
6	3200 B Landry Ave New Orleans, LA 70114
6	3915 Perrier St, New Orleans LA 70115
6	3823 St. Charles Ave., New Orleans LA 70130
6	735 General Pershing St, New Orleans LA 70115
6	736 ALINE STREET, New Orleans LA 70115
6	901 Richard Street, New Orleans LA 70130
6	928 Felicity St., New Orleans LA 70130
6	1201 S Roman St New Orleans, LA 70125
6	1307 Oretha Castle Haley Blvd, New Orleans, LA 70113
6	1377 Annunciation St New Orleans, LA 70130
6	1400 Camp St, New Orleans, LA 70130
6	1401 Simon Bolivar Ave, New Orleans, LA 70113
6	1600 Constance St New Orleans, LA 70130
6	1614 Oretha Castle Haley Blvd New Orleans, LA 70113
6	1629 Simon Bolivar New Orleans, LA 70113
6	1920 Clio St New Orleans, LA 70113
6	2013 Simon Bolivar Ave New Orleans, LA 70113
6	2020 Jackson Ave # 200 New Orleans, LA 70113
6	2220 Oretha C Oretha Castle Haley Blvd New Orleans, LA 70113
6	2301 Marengo St New Orleans, LA 70115
6	2321 Thalia St New Orleans, LA 70113
6	2405 Jackson Ave New Orleans, LA 70113
6	2514 Third St, New Orleans, LA 70113
6	2622 S Prieur St New Orleans, LA 70125
6	2625 Thalia St, New Orleans, LA 70113
6	3127 Martin Luther King Jr Blvd New Orleans, LA 70125
6	3128 Constance St, New Orleans, LA 70115
6	3617 General Pershing St, New Orleans, LA 70125
6	3649 Laurel St New Orleans, LA 70115
6	4521 Martin Luther King Blvd New Orleans
6	820 Jackson Ave New Orleans, LA 70130
6	1025 Napoleon Ave, New Orleans, LA 70115
6	1225 Magazine St, New Orleans, LA 70130
6	4111 S. Prieur Street, New Orleans LA 70112
6	1522 Chippewa St, New Orleans, LA 70130
6	2001 Constance St, New Orleans, LA 70130
6	2343 Prytania St, New Orleans, LA 70130
6	1938 Dumaine Ave #3930, New Orleans, LA 70125
6	4301 St Charles Ave New Orleans, LA 70115
6	500 Soraparu St, New Orleans, LA 70130
6	821 General Pershing St, New Orleans, LA 70115
6	923 Napoleon Ave, New Orleans, LA 70115

Zone	Address
7	1023 Sumner Street, New Orleans LA 70114
7	1801 L. B. Landry, New Orleans LA 70114
7	1805 Farragut St, New Orleans LA 70114
7	2100 Ellen Park Place, New Orleans LA 70114
7	2933 Sandra Drive, New Orleans LA 70114
7	3131 Eton Street, New Orleans LA 70131
7	3407 Wall Blvd., New Orleans LA 70114
7	3601 Kent Dr., New Orleans LA 70131
7	3619 Paul St, New Orleans LA 70131
7	3700 Tall Timbers, New Orleans LA 70131
7	3720 Aurora Dr, New Orleans LA 70131
7	3819 Herschel St., New Orleans LA 70114
7	3843 General Meyer, New Orleans LA 70114
7	4614 Berkeley Meyer Ave, New Orleans LA 70131
7	5824 Berkeley Drive, New Orleans LA 70131
7	800 De Armas, New Orleans LA 70114
7	1122 Teche St, New Orleans, LA 70114
7	1200 B Landry Ave New Orleans, LA 70114
7	1415 Teche St, New Orleans, LA 70114
7	1871 Farragut St New Orleans, LA 70114
7	1904 Casa Calvo St New Orleans, LA 70114
7	2013 General Meyer Ave New Orleans, LA 70114
7	2123 General Meyer Ave, 70114, New Orleans
7	2144 Pace Blvd New Orleans, LA 70114
7	2701 Lawrence St New Orleans, LA 70114
7	2975 Behrman Hwy New Orleans, LA 70114
7	3029 Wall Blvd New Orleans, LA 70114
7	3050 Gen Collins Ave New Orleans, LA 70114
7	3501 Seine St New Orleans, LA 70114
7	3600 General Meyer Ave B New Orleans, LA 70114
7	3605 Garden Oaks Dr New Orleans, LA 70114
7	3700 Tall Pines Dr, New Orleans, LA 70131
7	425 O' Bannon St, New Orleans, LA 70114
7	4349 General Meyer Ave New Orleans, LA 70131
7	4400 General Meyer Ave New Orleans, LA 70131
7	502 Olivier St, New Orleans, LA 70114
7	5300 Berkley Dr, New Orleans, LA 70131
7	6501 Berkley Dr New Orleans, LA 70131
7	715 Opelousas Ave New Orleans, LA 70114
7	775 Hunley Ln Federal City, LA 70114
7	7240 General De Gaulle Dr, New Orleans, LA 70114

Zone	Address
8	1240 Touro St., New Orleans LA 70116
8	1313 Esplanade Avnuue, New Orleans LA 70116
8	1519 Dumaine, New Orleans LA 70116
8	201 St. Charles Ave. Suite 4411, New Orleans LA 70170
8	2101 Lafitte Street, New Orleans LA 70112
8	4111 S. Prieur Street, New Orleans LA 70112
8	6056 Warrington, New Orleans LA 70112
8	721 St. Phillip St., New Orleans LA 70116
8	1423 St Phillip St New Orleans, LA 70116
8	1938 Dumaine St New Orleans LA 70116
8	2011 Bienville St, New Orleans, LA 70112
8	2101 Lafitte St New Orleans, LA - 70112
8	353 Baronne St, New Orleans, LA 70112

REV.	DATE	DESCRIPTION	BY
SEWERAGE AND WATER BOARD OF NEW ORLEANS			
LEAD SERVICE LINE REPLACEMENT LIST OF SCHOOLS			
<b>CONTRACT NO. 2167</b>			
DR.	D.Mc.	GENERAL SUPERINTENDENT	
TRC.			